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AMERICA MORE BEAUTIFUL



**GREENING'S
BOOK OF
NURSERY PRODUCTS**

THE GREENING NURSERY CO.
MONROE • MICHIGAN
LARGEST GROWERS OF TREES IN THE WORLD



The South Haven Peach

The Peach Meritorious

RIPENING PERIOD. Two to three weeks ahead of the Elberta market, thus avoiding a heavy Peach supply market.

Hardiness is a quality that should be considered by commercial Peach growers. And our South Haven Peach is the hardiest of all worthwhile varieties.

Read pages 40 and 41 for the full history of this Peach, and while we do not advise that any Peach orchard should be set solid of one variety, yet we do think that the South Haven should be included in all settings, because there is no other Peach that compares with it in all the essentials of a commercial variety.

The Greening Nursery Company
Monroe, Michigan

BORN 1850

STILL GROWING

GENERAL CATALOG

THE *Greening
Nursery
Company*

MONROE
MICHIGAN

Born 1850 Still Growing

GROWERS OF
EVERYTHING FOR THE

Orchard, Park and Ornamental Garden.

AND

Its Subsidiary

THE *Greening
Landscape
Company*

*An Association of Graduate
Landscape Architects*

*Plans and Specifications prepared for
Parks, Estates, Cemeteries, Golf Courses,
Sub-divisions, Country Clubs, Residences etc.*

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LARGEST GROWERS OF TREES IN THE WORLD



EVERY EFFORT is used by us to produce quality stock. No pains are spared in grading, storing, packing and shipping. We know that each of the operations named above is essential in giving you satisfactory service. But, if upon opening any stock received from us you find it not up to expectation, please write us immediately, because on every shipment that leaves our cellar we have attached a tag on which is printed

Are You Satisfied with Greening's Stock? No Sale is Complete Unless You Are

We mean this, and it is to this simple application of the Golden Rule in our every day dealing, whether large or small, that we attribute our success; it is wholly on this basis that we solicit your business.

Also our experience is at your service. Should you have any problems relating to planting or care of your trees and plants, we will be glad to give you the benefit of the knowledge along this line accumulated by three generations of the Greening family.

The Greening Nursery Company Monroe, Michigan

Born 1850—Still Growing



JOHN C. W. GREENING
Founder
Greening's Big Nurseries

A Bit of History



In the cut above we show a reproduction of an old photograph of the late J. C. W. Greening, founder of The Greening Nursery Company, and also an old photograph of Mrs. J. C. W. Greening, now deceased, and Mr. George Bruckner, taken in an orchard which was planted by Mr. Greening and Mr. Bruckner in the afternoon of the day each of them voted for Abraham Lincoln for President!

The group shown below consists of four generations of the Greening family, namely: Mrs. J. C. W. Greening; her son, Chas. E., now president of the Greening Nursery Company; Benjamin J. Greening, vice-president of the present Company, and his son, Chas. B., Jr.

The policies inaugurated by the late J. C. W. Greening at the inception of the Greening business when he started the propagation of trees and plants, have been followed since by each generation. Unswerving adherence to his policies thru these many years has resulted in the largest retail nursery business in the world.



OUR NEW OFFICE BUILDING.

We maintain the same efficiency in the office as in the field. It is comfortable, also conveniently arranged. Situated right on the Dixie Highway, across the street from the Post Office. We get mails promptly, and our customers in driving through, find it convenient to drop in and get acquainted. The Nursery is only a few minutes distance by auto from the office.

Reasons Why

Our Prices Are As Uniform As the Quality of Our Product

A tiny seed is planted. If the soil be kindly, weather propitious and the nurseryman will carefully cultivate, spray, dig, store, grade, pack, and ship the tree or plant that results from the tiny seed, it will reach the place it is to occupy for its natural life in good condition.

Soil and climate are matters of location and good judgment on the part of the propagator in selecting the site for his operations. But planting, cultivating, spraying, digging, grading, packing and shipping are the little things that make for growth and service, and in this modern age service—or the little things that make it—stands for satisfaction in the mind of the consumer and is essential to all business success.

Three generations of Greenings have bent their every energy to produce stock of high quality and to so care for it that when it reached marketable age it would reach the great consuming public in a satisfactory condition. They were pioneers in many nursery operations, notably that of **storing**, and as we claim we produce the highest grade stock in America the reasons for our making this claim are briefly as follows:

SOIL. We have already said that soil and climate are matters of location, and the founder of The Greening Nursery Company in selecting his site chose a rich loam with a clay sub-soil on the west shore of Lake Erie, which has shown its adaptability for producing good, healthy, thrifty nursery stock until our product is admitted to be the best rooted in America.

CLIMATE. Our climate, too, is one of our big assets. Stock produced in this climate is hardy. Rainfall is ample so that we never fail

to produce **clean, smooth, sturdy** bodies with **fibrous roots**.

UNDERSTOCKS. We have emphasized that our product is well rooted. **WHY?** Because we import our seedlings from the largest grower of seedlings in the world. These come from northern Italy in the valley of the Alpine Mountains where only the largest select plants are graded out for use in our nurseries. It will be noted by referring to the illustration on page 5 that we use only branched roots.



CULTIVATION. By constant and thorough cultivation these seedlings are kept in a thrifty condition and are never allowed to have any reverses within the control of man during their young and growing life. They are not crowded in the field but are given ample space to develop a good trunk and healthy root system. The care exercised during the process of budding or converting these seedlings or understocks into desirable varieties is carried almost to the point of extravagance to prevent any mixtures in varieties. We use only buds of known origin or parentage in propagating our fruit trees, and these young trees are not permitted to grow at will thereafter but are kept within bounds by careful individual attention until they arrive at a saleable age.

SPRAYING AND FUMIGATION. All living things are subject to disease and trees and plants are no exception. They also are subject to attacks of insects and as we are not permitted to ship our product into any other State unless it is inspected regularly by the State Inspector and we are given a certificate to that effect, our stock is healthy and free from all disease.

To keep trees and plants in a healthy condition it is necessary that spraying be resorted to, and we are fortunate that we have with us men of inventive minds who are able to build the machinery we use in our nursery operations in our own shops. By the use of our wonderful spraying machines we are able to keep our nurseries free of insects or fungous infections,



thus insuring a vigorous, healthy growth essential for good results after planting out. And as a further precaution, all of our stock is thoroughly fumigated before storing away.

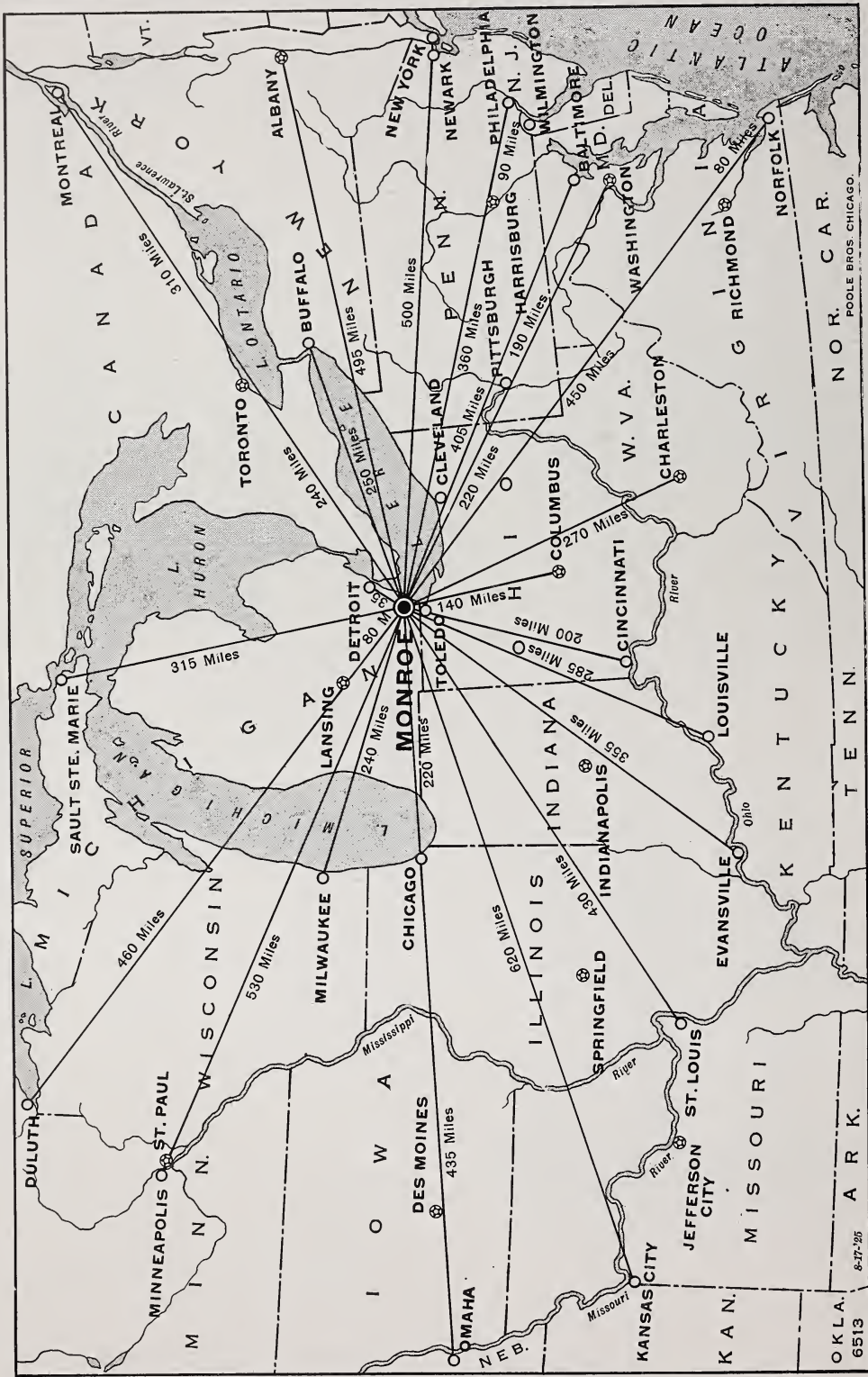
DIGGING AT THE RIGHT TIME. Digging early in the fall may be a great advantage because of the short season for digging. However, to dig any tree or hardy plant early in the fall before the sap has a chance to fully recede to the roots gives a shock that checks the vitality of the tree. Live trees cannot be handled carelessly like a lot of wild brush without loss to the planter who pays the bill. The strictest rules of preserving the growing vitality of our trees are scrupulously observed in this as well as all other operations. A visit to our nurseries will convince anyone of this fact. It is for this and other reasons that we encourage Spring planting.

Thousands of dollars can be saved by a nurseryman in digging trees early and in the ordinary manner as it is very costly to run a digger beyond a certain depth. This cost not only arises from added power required and more machinery breakages, but a much greater labor cost to remove the trees from the fields when handled in our manner.

Our power digging machine (a Greening invention) passes very deeply beneath the surface of the soil and gets practically all the roots. The root system of a plant is its very stomach—the very life—and its most important functional organ. We simply will not attempt to save money foolishly while digging our plants



This picture illustrates the big-rooted trees we offer to those who appreciate quality stock. The roots are the life of a tree. Greening's trees grow because they are propagated only on whole-rooted, transplanted, branched seedlings.



SHIPMENTS—We are so situated that shipments can be made with dispatch to any point in the United States and especially so to all sections of our country illustrated above.



DIGGING TREES BY POWER—A SCIENTIFIC TRIUMPH.

Progress is the watchword of the American people. This progressive spirit has manifested itself in the invention of a tree-digging machine, by means of which trees may be dug without the slightest danger of bruising or injuring the roots. As shown in the illustration, the ground has been dug away directly back of the digger, exposing to view the steel blade and lifter of our modern tree-digger, running at the time under our mammoth block of whole-root apple trees at a depth of 30 inches. Do not such methods appeal to an intelligent people? With these facilities we are able to furnish trees with abundant masses of fibrous roots, such as will grow and make splendid orchards of strongest fruiting power.

after having built a nation-wide reputation on our wonderful root systems. We attribute the success of our well established business more or less to this very important nursery operation.

STORING TREES TO PREVENT DETERIORATION. The matter of handling nursery stock prior to shipment and winter storage so as to preserve the growing power of the tree is a scientific study with us. No tree can be dug and transplanted without a certain amount of loss in vitality. The careful nurseryman, however, endeavors to retain the vitality by handling, storing and packing before shipment in such a manner as to keep the trees in as near a natural condition as possible, which is an obligation we owe to our customers. Our cellars (the pride of our nurseries) are considered a great modern achievement. There is no chance of stock drying out or spoiling. Every process of handling and packing is done under roof; temperature kept moist and the stock never exposed to wind or sun.

GRADING AND SORTING. Each tree, shrub, rose, vine, evergreen and plant is handled individually and graded out under an established standard as to size, root system

and quality. Trees in the nursery row vary in size and several grades of sizes are made for grading out. Every tree or shrub is carefully examined and if found defective is thrown out. A tree or shrub may have the size but might be defective otherwise, so we endeavor to safeguard customers' interests by furnishing reliable, clean, healthy stock, true to name.

But a shrub 2 to 3 feet in height means nothing to the buyer unless that shrub is well rooted, and the tops well branched and bushy, even though trees and plants are sold by height or other dimensions of trunk or stem. The most important part of a tree or plant is its root system from the standpoint of vigor, and although nothing is mentioned in specifications of plants with reference to their roots, we are most careful to dig, grade and sort our product to have a root system much above the average which accounts in no small measure for our great success.

PACKING. Before stock is shipped it must be packed, and here it is that extreme care is needed. Our stock is packed in such a manner that it will keep for weeks in transit, as we line our boxes with paper made on purpose for this use, the paper being wind-proof, thus pro-



NURSERY SPRAYING: A SCIENTIFIC TRIUMPH—OUR SPRAYING APPARATUS.

During the process of our experiments and investigations for obtaining knowledge of causes and effects, our attention has centered on the scientific experiments in spraying to obtain two distinct results:

First—Spraying with a solution of lime and sulphate of copper for the purpose of preserving the foliage; in other words, to ward off all fungous diseases, and thus to stimulate the growing functions of trees and plants.

Second—To destroy the insects by adding arsenic poisons in prescribed quantities. Under this method we keep the trees in good growing condition during the entire summer season, thereby counteracting a weak and tender second growth, which is often the case when trees have stopped growing from some cause during the summer months.

tecting the trees from drying out. A vast amount of nursery stock reaches its destination in a condition that is only fit for the brush heap as a result of careless work and handling in the nursery. We strictly enforce the keeping of our stock moist and in perfect condition so that it will arrive in good condition even if shipped across the continent.

SHIPPING. Our business is of immense volume. We load our cars at the cellar, shipping direct from storage and are fortunate in our location, as we are thus able to reach all points in the quickest possible time, because the three largest railway systems in America touch Monroe and we are only twenty miles away from the next two largest at Toledo so that in routing shipments we have the benefit of the five big transcontinental lines and are thus able to reach all points quickly.

We are also in touch with the many rapid electric freight lines that radiate from Monroe, Detroit and Toledo in all directions, thus securing express service at freight rates. The Dixie Highway, one of the best known national highways passes through Monroe, affording us

the opportunity of shipping by truck when feasible and providing our customers the opportunity of coming direct to the nursery for their stock if they so desire, over well paved highways.

Our stock is sent, unless otherwise noted, all charges paid to destination, with no charges for boxing or packing.

SERVICE. Our service does not end at the time shipment is made because our product is perishable and must be delivered to its destination in the shortest possible time. Consignees are notified when shipment is made and bill of lading sent. If delivery by any chance is not made within a reasonable time we should be notified in this connection, so that we can locate the shipment and rush it forward to destination without delay.

We take all responsibility and guarantee our stock to arrive in perfect condition where we pay the freight. However, complaints must be made within five days after stock is received to enable us to collect damages from the common carrier in case the shipments have been unusually delayed. If not notified within five days our responsibility in this respect ceases.



The Value of Fruits as Food

Unfortunately the value of fruits as food was not rightly understood until the great world war of 1914. But we now realize how necessary fruits are for proper diet.

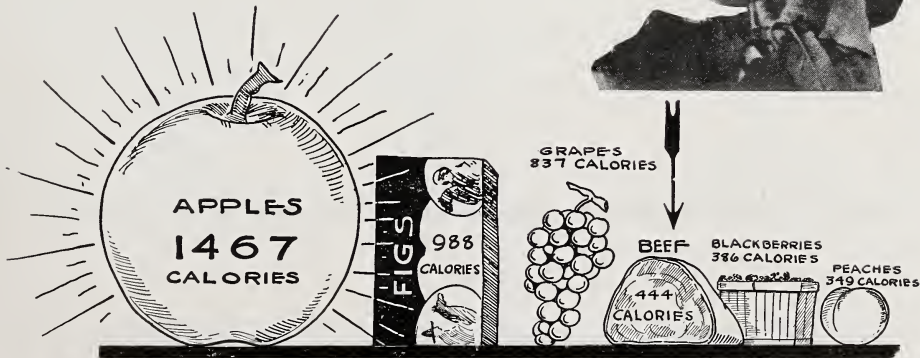
We are reproducing a drawing taken from FARMERS' BULLETIN NO. 293, showing the amount of heat and energy units that can be purchased for 10 cents in various kinds of fruit as compared with porterhouse steak, and these figures are given in detail below :

Porterhouse Steak.....	444
Apples.....	1467
Grapes.....	837
Peaches.....	349
Blackberries.....	386
Figs, dried.....	988

This shows that we are getting good value for our money when we buy fruit as food, but its greatest value is not in the amount of energy, but in the tonic or stimulating effect that it possesses.

*“An Apple a day
Keeps the Doctor Away”*

Follow this practise and you will feel healthy and robust and better fitted to do your daily duties. Fruit will keep your system toned up and every organ will be in perfect order. If you feel drowsy and dejected, eat an apple; it's like taking a pill, only it's more natural and and much better. Try it.





Large Profits In Fruit Growing as Compared With Cereal Crops or General Farming

The population of the United States is increasing faster than the production of fruit, and has for years past. At present fruit growing is more profitable than livestock, grain or dairying.

And if you engage in it you are assured a market without any expenditure! Why? Because every ten years the United States increases her population from twelve to fifteen million, and this population is made up mostly of consumers.

The Department of Agriculture says in its last annual report that all the land in the United States capable of development has already been improved and that we must in the future depend on the five hundred three million acres for food, whether it be fruits, meats or grains. Wise owners of lands adaptable to fruit in the right location can very profitably devote serious thought to this fact and should consider this: That fruits now occupy a much higher place in the dietary of man than they did formerly—that they are now considered essential to health, and they will be consumed in greater quantity in the future than they have in the past. This means the door of opportunity is open wide. For instance, apple production is

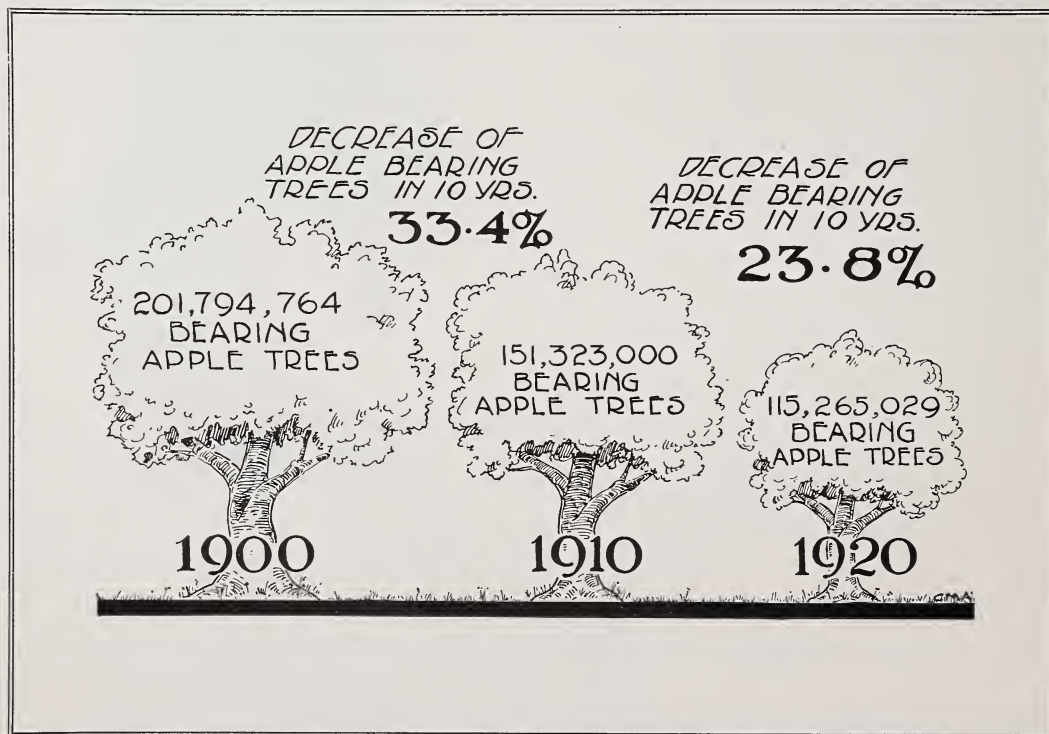
increasing only six tenths of one per cent, or less than one-half as much as population. In 1890 a normal apple crop was two and four-fifths bushels per capita. In 1920 one and seventy-seven hundredths bushels.

The decrease in peach trees of bearing age between 1910 and 1920 was thirty and five-tenths per cent.

Peach trees not of bearing age decreased in the same period forty-eight and eight-tenths per cent. In fact, the figures secured by the Census Bureau show a tremendous increase of consumers and an alarming decrease of apple and peach trees. As the demand increases and the supply decreases, prices will rise proportionately.

Profits in fruit growing depend as in all business enterprises on the owner. A well cared-for orchard or small fruit farm pays if looked after. There is a market for all fruit if properly grown, graded and marketed.

We have shown you the profits from a well-cared-for orchard on page 11, and because there has been little apple planting in the United States since 1910, there is no danger of over-planting for the next thirty years.





DUSTING MACHINE.

The new Dusting Machine manufactured by the Niagara Sprayer Company of Middleport, New York, is very rapid, and is especially valuable in combating insects and diseases in nursery work. Instead of applying the poison in liquid form the machine is designed to apply it in finely powdered form.

The Greening idea is to apply poison to prevent the attack and spread of insects and disease, rather than destroying the pests after they have begun their damage upon the trees, etc. For that reason Greening's Trees are diseaseless trees.

One Dollar Value Increase Per Tree Each Year

And do you know that each year's growth of the young apple orchard adds one dollar's value to each tree? In other words, a tree well cared for, for twenty years is estimated to be worth \$20.00. Now what can be expected per acre from a good apple orchard? We know of two acres in Oakland County, Michigan, that have yielded 700 bushels of apples, which sold for over \$1500.00 on the ground, three of the trees bringing \$105.00 in cash! A farmer in Monroe County, Michigan, in which our nursery is located, with a ten acre apple orchard realized more from it than from his two hundred acres in growing cereal crops.

Five Hundred Dollars Per Acre Profits

At a meeting of the Illinois State Horticultural Society in 1918, the members discussed profit and what might be expected when fruits were given the care necessary to their greatest

development. The members gave specific examples of what has been done and one grower from Olney, Illinois, reported \$500.00 per acre from his orchard. Another from Neoga made the same statement and still another said that in 1918 he had made \$12,000.00 from twenty-eight acres. Remember, these profits were net, and the men had orchards ranging from twenty to eighty acres. Their figures were conservative, being given in open Convention.

The apple orchard planted for commercial purposes requires capital to develop. The general farmer who plants an apple orchard and cares for it along with other work will eventually derive a nice profit from it. The cost, until it comes into bearing, will be absorbed and taken care of by the general farm crops. After it begins to bear it will be the most profitable crop on the farm. It is universally conceded that the apple of New York, Michigan, Wisconsin, Illinois, Indiana, Ohio and Pennsylvania has a flavor—an aroma—a quality—that western growers are not able to secure, and it is regrettable that more apple orchards are not planted in the states mentioned, as the markets are unlimited for higher quality fruit, well graded, from these states.



BUDDERS AND WRAPPERS.

An aggregation of skilled workmen in the science of budding trees. A small army of active people selected from the most reliable, skilled and intelligent help at the nursery. With this force we are able to bud about 85,000 trees per day. The varieties are carefully guarded against mixture.

Selection of Varieties

Before planting an orchard it is well to consult those with experience and knowledge of the subject. This is especially true if you intend to plant a commercial orchard. Our knowledge is at your service, free of charge, or if you prefer, we suggest that you write your State Experiment Station; their advice is always good and may be safely followed.

Inter-cropping and the Use of Fillers

To plant an orchard of apples and wait for it to come into bearing for commercial purposes is a plan that few farmers or fruit growers care to undertake without receiving some returns from the land occupied and the labor and expense connected with it. This may be overcome by growing bush fruits, annual crops of early bearing or by the use of the varieties named below, which are generally grown as fillers. But if fillers are planted, do it with a determination to remove them just as soon as they begin to crowd the other trees or when the permanent or standard trees come into bearing 15-18 years later. Also, if the filler plan is adopted, you must make greater efforts to conserve the moisture and preserve the fertility of the soil.

Peaches and plums make good fillers in most localities. Pears should not be planted among

apples, where clean cultivation or mulch culture is practiced. Of the apples, Wagener, Grimes Golden, Duchess of Oldenburg, Wealthy, Jonathan and Yellow Transparent are successfully used as fillers.

Mixed Planting Many varieties will not bear well when planted alone or in large blocks because some varieties of fruit are more or less self-sterile. They require the pollen of other varieties to fertilize and cause the setting of fruit. Inasmuch as all varieties benefit by cross pollination, it is good practice to plant not more than four or five consecutive rows of one variety in a block.

Self-Sterile Varieties Among apples which are more or less self-sterile are: Yellow Bellflower, Chenango, Gravenstein, Tompkins' King, Northern Spy, Primate, Roxbury Russet, Esopus and Tolman Sweet.

Self-Fertile Varieties The apples which are mostly fertile are: Baldwin, Greenings, Duchess of Oldenburg, Red Astrachan and Yellow Transparent.

PEARS more or less self-sterile: Angouleme, Anjou, Bartlett, Clairgeau, Clapp's Favorite, Howell, Kieffer, Lawrence, Louise and Sheldon.



PEARS generally self-fertile: Bosc and Seckel.

PLUMS more or less self-sterile: Italian Prune, and Satsuma.

PLUMS generally self-fertile: Burbank, Lombard, Damson and Bradshaw.

(For a more extended discussion of this subject, see Bailey's Principles of Fruit Growing).

EVERGREENS. After planting soak the ground thoroughly and apply a thick covering of strawy manure or some other mulchy material over the surface of the ground around the tree to retain the moisture. Evergreens, the first season, require an abundance of water to offset evaporation. The ground should be soaked thoroughly at least once a week the first three months.

Distance for Planting

Apples should be planted from 32 to 40 feet apart each way. Most of our old orchards were planted too closely. When planted too closely they not only interfere with each other but also hinder spraying and cultivation. The variety will determine the proper distance to plant, the planter considering whether the variety is an upright or spreading grower. For example, the Northern Spy as compared with the Wagener.

Apples	32 to 40 feet apart
Pears, Standard	18 to 20 feet apart
Pears, Dwarf	10 to 15 feet apart
Sweet Cherries	20 to 25 feet apart
Sour Cherries	18 to 20 feet apart
Plums	18 to 20 feet apart
Peaches	18 to 20 feet apart
Apricots	18 to 20 feet apart
Quinces	10 to 16 feet apart
Grapes	8 feet apart
Gooseberries and Currants	4 by 6 feet apart
Raspberries, Red	2 by 7 feet apart
Raspberries, Black	3 by 7 feet apart
Blackberries	2 by 7 feet apart
Dewberries	3 by 7 feet apart
Strawberries	1 by 4 feet apart

Number of Trees and Plants to an Acre

At 4 feet apart each way	2723
At 5 feet apart each way	1742
At 6 feet apart each way	1210
At 8 feet apart each way	681
At 10 feet apart each way	435
At 12 feet apart each way	302
At 16 feet apart each way	170
At 18 feet apart each way	134
At 20 feet apart each way	108
At 25 feet apart each way	70
At 30 feet apart each way	50
At 32 feet apart each way	40
At 40 feet apart each way	27
At 45 feet apart each way	22

The Site and Soil For an Orchard In selecting a site for an orchard, the question of soil and location is of utmost importance. An elevated location having good surface and air drainage is

preferable. Under drainage is recommended on level ground for best results. Drainage makes the soil loose and warm.

Care of Young Trees Before Planting

Immediately after receiving the trees or plants from the nursery they should be thoroughly soaked, and wrapped and covered to prevent drying out. Take them home at once and heel-in without delay. If frozen, put in cool cellar where frost will gradually come out. To heel-in, a trench should be dug at least 18 inches deep. Loosen the lower band on the bundle, wet the trees thoroughly and place them in the trench. Cover the roots and press the soil down firmly around them. All trees when heeled-in, should be placed in the trench with tops leaning toward the south at an angle of 45 degrees. Soil should be carefully placed around the roots to exclude all air and the trees well banked for protection. It is advisable to cover about two-thirds of the trees with soil. If to be heeled-in over Winter, select a place where water will not stand, away from buildings and meadows where mice will not injure them. Strawberries, raspberries and blackberries, if well dampened, can be kept in the cellar until ready to plant.

Preparation of the Soil for an Orchard

Never plant trees in sod. Trees should be given a good start in their younger years. An orchard is planted for a lifetime. The soil should be prepared better than for ordinary crops. An orchard planted after a cultivated crop such as corn or potatoes will do best, all things considered. Under-drainage of wet soils is absolutely necessary.

Laying Out and Planting

After the soil is well prepared a hole should be dug sufficiently large in width and depth to admit the roots in their natural position with some loose earth in the bottom of the hole. Trees should be planted about two inches lower than they stood in the nursery. Place the tree in position; fill in fine mellow soil around the roots with the hand, arranging all the roots in their natural position, packing the soil firmly around them and under the crown. Do not press down on the tree to make it fit while planting.

Fill up the hole within two inches of the top and press down the earth with the foot, being careful not to break or bend the roots. Then throw in about a gallon of water and fill up the hole level with loose soil, but do not tread upon the loose soil.

For Spring planting level the soil around the tree after planting. In the Fall bank up against the tree a little soil after planting and remove to a level in the Spring.

In planting trees after the stakes have been set a planting board will be found beneficial. Its use will enable the planter to keep his trees in exact line, which will render cultivation easier and make the orchard more sightly.



Fig. 1—The planting board made from inch board 5 feet long, 3 inches wide. Cut notches for stakes.

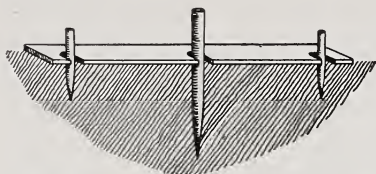


Fig. 2—Planting board and stakes placed in position before digging holes.

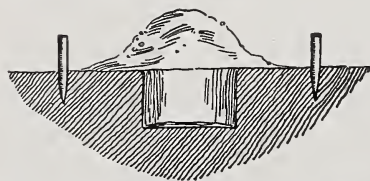


Fig. 3—Remove planting board and center stake, don't disturb the small stakes. Dig hole.

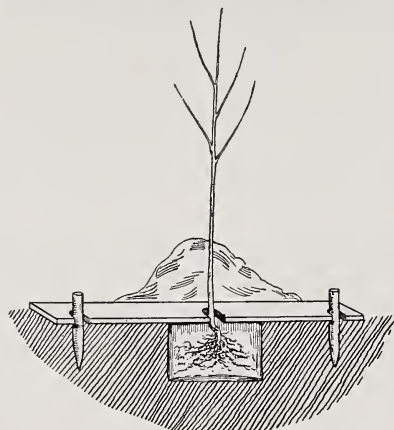


Figure 4.

Planting Board

The planting board is a board six inches wide and about five feet long, notched as shown in the picture. Place the board at the middle notch against the stake and drive small stakes in end notches as shown in fig. 1. Next remove board and dig hole, leaving end stakes in place, fig. 2. After the hole is dug, place the board against the two end stakes and replace the large stake as shown in fig. 3. In planting, always place the tree close to the stake.

When large orchards are to be planted, a more extensive method of planting must be used, but the following simple plan will be found quite accurate, if the work be carefully done. As shown in the following diagram,

rows of stakes are set completely around the field and near enough to the edge of the field so as not to interfere with any of the trees that are to be planted. Then two other rows of stakes are set at right angles across about the middle of the field and again avoid the location of any trees to be planted. These rows of stakes need be in straight lines spaced in the rows at intervals equal to the distance at which the trees are to be planted. If the field is rolling or if for any reason the planters cannot see entirely across the field, more cross rows of stakes will be needed.

Where the field is very rolling it may become necessary to establish the lines of the rows by means of setting across the field from end to end and placing line stakes on top of the hills.

Pruning Roots before Planting

The soil should be in the best of condition, smooth and in good tilth. In preparing a tree for planting, all mutilated or injured tips of roots should be trimmed off, and large slender roots cut off to correspond with the length of the main roots. When the young trees are dug in the nursery, a small portion of the root system is necessarily removed and a few of the roots may be broken. However, by the Greening method of digging trees, practically all of the roots are left on the tree and there is but little danger of injury. In handling the trees every precaution should be taken to prevent the roots from becoming dry. Undue exposure during the period that elapses between the trimming and the planting of the trees will injure them.

Planting the Trees

In digging the hole before planting, make it wide enough and deep enough so the roots can be spread out in their natural position and not crowded, and when digging, it is a good plan to keep the top soil and the sub-soil separate, and when planting use the top soil down around the roots, as it is more fertile than the sub-soil.

It is also well to put a little well-rotted manure in the bottom of the hole, covering it with several inches (3) of top soil. In planting the trees after they have been properly root pruned several important precautions must be observed if the desired success is to be realized.

In filling the hole after the tree has been put in position and properly aligned, only finely pulverized top soil should be used. In this part of the operation much care should be taken to work the soil in closely about the roots, moving the tree up and down very slightly as the hole is being filled, will also materially help settle the soil around the roots. This soil is then tamped firmly with foot, and more soil added and tamped, but leave a thin layer of loose soil at the surface after the hole is completely filled. After the tree is planted it should stand about two inches lower in the ground than it formerly did in the nursery.



PRUNING PEACH TREES

The pruning of peach trees at planting time to form a low crown consists of cutting back the top to about two feet above the ground, after planting, leaving spurs as shown in illustration one inch long. In case there are no branches to cut to spurs, the buds on the tree will answer the purpose of the spurs, and form a perfect head.



PRUNING APPLE, PEAR, PLUM AND CHERRY TREES

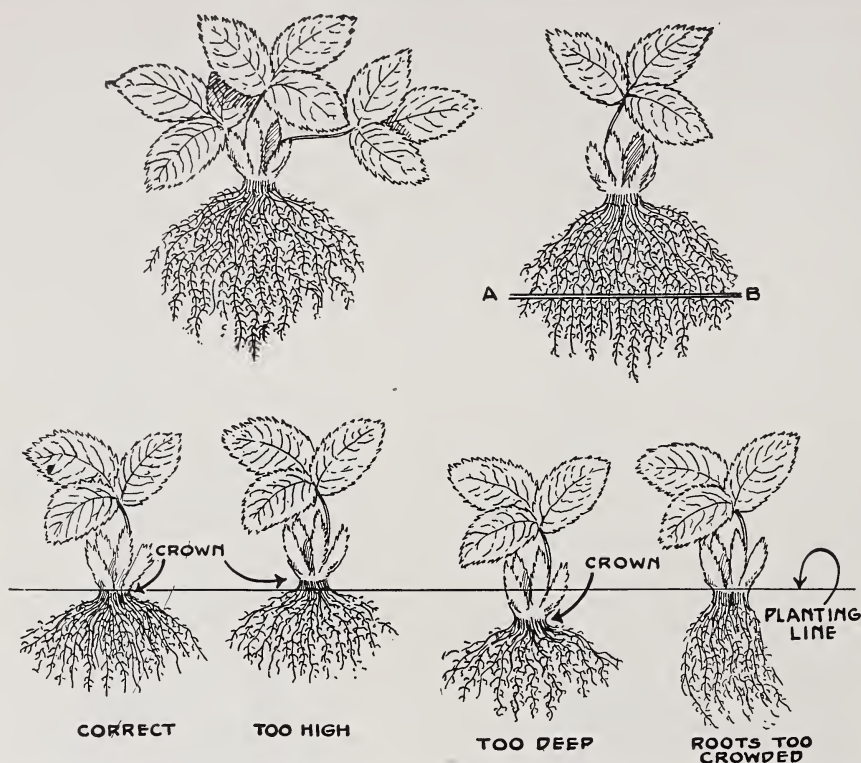
Prune off all the branches except the upper three or four; these cut back to spurs about six to eight inches in length. Good judgment is necessary in selecting branches for the crown, such as will form an evenly balanced head.

It is possible for one man to do the planting alone, but for convenience and rapidity two men can work better together. One man can set the tree in its proper place and spread the roots while the other throws in loose soil just a little at a time as above described. The ground surface around the tree should be slightly depressed after planting to catch the water. Banking up should be avoided.

Cultivation During the first three years of an orchard, keep the land well and deeply cultivated to force the roots to grow deep. The practice thereafter is to cultivate shallow and often, to maintain a loose surface to prevent evaporation of moisture. The importance of tillage primarily is to hold the moisture which enters the soil during the Spring rains over the Summer or drought period and to hold moisture from any subsequent rains and secondarily to keep the surface clean of weeds. In doing one thoroughly you do the other. A loose surface of three or four

inches is of sufficient depth to retain the moisture beneath it. The tools generally used for surface tillage are the smoothing harrow, or the spring-tooth harrow. It is surprising to see how the tree or plant will respond to good, thorough cultivation. The stirring of the soil with hoe or cultivator stimulates the vigor of growth, enlarges the root system, prevents a check in the growth of the plant, and carries it through to maturity with safety. The fruit growers should follow this practice diligently to insure a successful orchard. If he is haphazard and doesn't cultivate regularly he cannot expect to grow trees successfully, any more than a farmer who plants corn can expect to make a profit without cultivating it.

Implements A disc or spring-tooth harrow seems to be about the best all-around implement to use during the growing season, especially on light soil. During the dry season use a tooth-harrow, and go over the ground as often as once a week to



How to Plant Strawberries.

prevent evaporation of moisture from the soil. A man with a harrow and team can go over a large space in a day, and keep down the weeds in a large orchard at a small expense if worked at the right time. In heavy soils, shallow plowing in the Fall is very essential. Harrow and work crosswise and lengthwise. Use a hoe or special extension harrow around the trees. If cover crops are planted a turning plow and grain drill will also be very useful.

Fertilizing In bearing orchards liberal manuring is advised. Barnyard manure stands in the lead as an all-around fertilizer. For peaches, cherries and plums a fertilizer rich in potash and phosphoric acid is best. Ashes in sand soils, or on lands deficient in potash are of greatest value. They should be spread broadcast over the surface and harrowed in. The value of ashes as a fertilizer for fruit crops is not being sufficiently appreciated; they are highly recommended by such authorities as Professor Bailey, and we notice that all fruit growers using them usually grow the finest fruit. Every bushel of ashes should be saved and kept in a dry place for future use. Plowing under green, leguminous crops, such as crimson clover, cow peas or field peas is excellent for recuperating bearing orchards. Sometimes the legumes will cause too great a growth of wood. In such

cases non-legumes will often be found very valuable as green manure.

Cover Crops Cover crops are essential in stimulating the fertility of the soil and as a Winter protection. When clean cultivation is practiced it should stop sometime between the middle of July and the middle of August, depending on the kind of orchard, location, etc., and a cover crop should then be sown. If growth of the trees needs to be aided it is well to plant a leguminous cover crop such as clover, beans, peas, soy beans, vetches, etc., which will add nitrogen to the soil, otherwise plant such non-legumes as oats, rye, buckwheat, etc.

Small Fruits See Planting Table for distance apart at which to plant. Plant all small fruits about one inch deeper than they stood in the nursery except strawberries. After planting, cut back the tops to 4 or 5 inches from the ground.

Ornamental Trees Plant same as fruit trees except that larger holes must be dug to accommodate the roots. Two-thirds of the tops should be cut off on all ornamental trees except the Cut-leaved Birch, Horse-chestnut or Hard Maples. These varieties should not be headed in.



Shrubby Trim off all the ends of the roots and plant about two inches deeper than they stood in the nursery. After planting, some of the limbs should be removed and some cut back, depending upon the nature of the shrub as well as its size when planted. It is well, usually, to remove about one-third of the foliage bearing area. If a very compact, bushy effect is desired, more severe cutting back of the limbs is necessary.

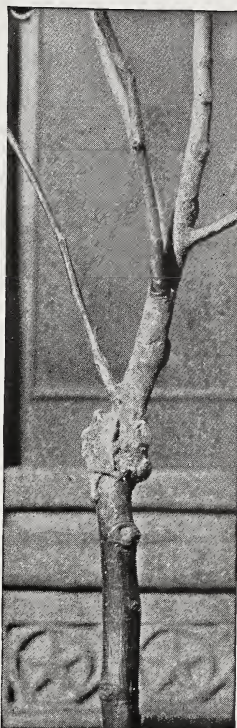
Roses Insist that all Roses you buy are field-grown. Furthermore, budded Roses of the Hybrid Perpetuals, Hybrid Teas, and Teas are far more successful than those grown on their own roots developed from soft wood cuttings. Own root Roses do not thrive well in this climate, although cheaper than budded Roses, they are most expensive in the end. Best soil is the clay loam. Set the plants four inches deeper than they stood in the nursery. All suckers growing out of the ground should be removed as soon as seen. All must be pruned more or less when planted. Do not neglect this. As a general rule, the more vigorous a variety the less it should be pruned. All weak or decayed wood should be entirely cut out, also any shoots that crowd or prevent light and air.

Spraying If fruit is to bring the highest market prices the trees must be sprayed. Spraying has come to be an established part of fruit growing. Every State Experiment Station, as well as the United States Department of Agriculture, issues bulletins on when and how to spray. Our new "GREENING BOOK ON HORTICULTURE," described on page 19, gives full instructions how to spray. Price of book, 50c prepaid.

Double-Grafted Stock

PURPOSE. To strengthen some weaknesses in a few leading commercial varieties.

Some excellent varieties of fruit unfortunately inherit undesirable characteristics. These may be slowness of bearing, scraggly growth or tendency to collar-rot. Three fruits which inherit the tendencies above noted and which



THE GRAFT.

The cut shows plainly where the union of the top of desired variety with the stem of a sturdier or more disease-resistant variety is made.

are too valuable to discontinue are the Steele's Red and Grimes Golden Apples, and the Bosc Pear.

The Steele's Red Apple is one of the choicest and most valuable Winter varieties, but on account of its poor and feeble growth, we double graft this variety on vigorous growing stock, thus eliminating all weakness of growth.

The Grimes Golden Apple is susceptible to collar-rot and the tree would be naturally short-lived except that we double-work it and by double grafting we secure a tree free from that and as long-lived as any.

The Bosc Pear is a notoriously slow grower, but by double grafting we are able to produce a strong, thrifty, productive tree. The Bosc is the most delicious of all Pears, and growers are urged to pay the small extra price we have to get for double-grafted stock of the varieties named above.

Greening's Top-Worked Trees

A Scientific Triumph, Outwitting Nature

To change the nature of a tree by scientific treatment may well be termed "Outwitting

Nature." Since it has been found that the body or stem of a tree controls and regulates the formation and development of the root system and the crown of the tree, it is possible to completely change the nature of a tree without in any way affecting the quality of the fruit, by infusing into it a hardier, more productive and more vigorous element of tree growth; and by giving it a stronger, more vigorous and deeper growing root system. This new science, as applied in the Greening Method, completely sets aside and corrects any feeble or weak habit of growth, thus changing the weak grower and shy bearer to a strong, vigorous and productive tree.

What Greenings' Have Done for Horticulture

The Bosc Pear, a late Fall variety, well known for many years as a fruit of unsurpassed richness and flavor, and undoubtedly the most de-



licious dessert pear known, has as an orchard tree, been considered worthless because of its miserable and weak habit of growth, but under our scientific treatment it has been restored to a strong, thrifty and heavy bearing tree.

For the Bosc we top-graft on the stem of the Kieffer, with French pear roots, thus combining three splendid elements into one. The combination makes a vigorous growing and prolific tree, as well as a strong, hardy trunk, which will stand the extremes of heat and cold, and likewise will produce and carry a heavy crop of fruit. When it is considered that the Bosc brings the highest price of any pear grown, frequently selling for as high as \$4.00 to \$5.00 per bushel in the commercial markets, it will readily be seen what top-grafting has done for this one variety of fruit alone.

Steele's Red, Completely Restored

By the Greening Method.

It is a well known fact that the Steele's Red is one of the choicest and most valuable varieties of all Winter market apples. Because of its beautiful, rich, red color, its excellence of quality and its wonderful keeping and shipping qualities, the Steele's Red is of such great market value that it generally brings from one to two dollars more per barrel than the other Winter varieties. Moreover, it is especially valuable for exportation to distant countries. However, on account of its poor and feeble growth, this valuable variety has been discarded from the list of profitable fruits by nurserymen and fruit growers.

Under the Greening System of treatment, by top-grafting the Steele's Red on the stem of the Gideon (A tree considered to be the most vigorous grower and hardiest of all apples), and the use of the French Crab root as a foundation, all weakness of growth of the Steele's Red has been eliminated. Not only that, but we have also produced by this system an orchard tree that will bear heavily of an excellent quality of fruit each year, instead of every other year as is common with many of our well known varieties. This change, which we have brought about in the Steele's Red, now places it on the list with the most profitable

varieties of American apples. The Gideon stock has a tendency to force a strong, vigorous, downward-growing root system and to establish the tree deeply in the subsoil. The combination of stock used to top-graft the Steele's Red, is in every way suited to make the tree hardy, productive and long lived. What we have done for the Steele's Red is possible to do with all other varieties, that in any way show weakness of growth, tenderness of wood, unproductiveness, or any other undesirable feature.

Our Department of Information If any assistance is desired—if any customer would like help—in the selection of varieties, free consultation may be had by mail with our Fruit Specialist, who is familiar with varieties and what the markets of the Middle West demand.

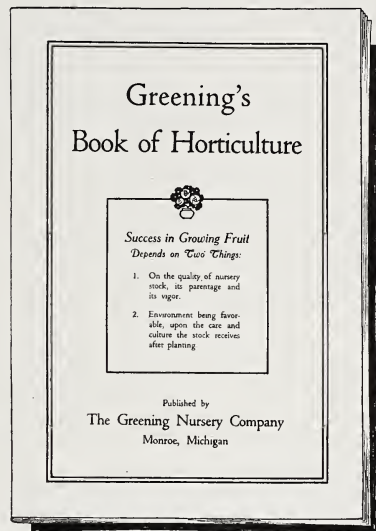
A commercial orchard should be planned as efficiently as a factory layout. Growing too many varieties of fruits increases the unit cost of production as well as the unit cost of marketing. Commercial orchards should not be "museums," containing every variety of fruit, but a selection should be made of those best suited for location as well as for the market demand.

On the other hand a succession in ripening of fruits to supply the demand of the local or roadside market should not be overlooked where such a situation might exist. Still the earlier ripening fruits should be grown sparingly and those varieties which come in the usual fruit season be in the large majority.

We will cheerfully give reliable information through this Department, as our Fruit Specialist is here to serve you by mail, free of charge. However, some problems cannot be handled intelligently by mail, and in case it is desired that our specialist make a personal visit to your grounds for consultation, a professional charge is made for this service and the expense to and from Monroe. Whether you make use of his professional services in this way is optional on your part, but you need not hesitate to write for any information that we can render by mail, as it will be gladly given without cost to you.

Address all correspondence along this line to The Greening Nursery Company, Attention Fruit Specialist.

Buy trees whose antecedents have merit — Don't plant mongrels of unknown ancestry.



Greening's New Book on Horticulture

THIS new and thoroughly up to the minute book on the practice of Horticulture in all its practical phases will be sent for the low price of 50c by mail, prepaid, or is given free with any order of nursery stock amounting to \$20.00 when requested. This is a valuable book of reference. It will be kept and referred to because it contains more matter of vital interest to the fruit grower than any similar publication extant at the price.

It has been prepared to take the place of both Greening's Fruit Growers' Guide and Greening's Book on Fruit and Vegetable Culture. You will now have in one cover, everything of value relating to the practical side of fruit growing as well as that of ornamental stock.

We give Table of Contents below:

TABLE OF CONTENTS

Chapter I	Preparation incident to setting out fruit stocks and the general care of same.	Chapter V	The Pruning of Shrubs.
Chapter II	Small fruits.	Chapter VI	Diseases and Insects and Their Control.
Chapter III	Picking, Packing Shipping and Marketing.	Chapter VII	Spraying, Including Formulas for Insecticides and Fungicides.
Chapter IV	Practical Suggestions on the Planting and Pruning of Ornamental Trees, Shrubs, Evergreens, Roses, Perennials, etc.		

Ask our representatives for this book or send 50c direct to us and same will be sent by return mail, postpaid.

Our Research Department

Trees From a Known Parent or Bud Selected Stock Greening's Super-Selected Strains of Fruits

Are you going to plant fruit trees?

If so, you should be interested in their quality, because several years intervene between the time they are planted until they reach bearing age.

And during these years, the interest on your investment in land, and the cost of the trees; labor of fitting land for planting; the cost of planting; the cultivating; the pruning and spraying must be considered because the cost is the same, whether the trees planted are of good parentage or poor, and the worth of the trees cannot be determined until you harvest your first crop.

THE BEST IS NEVER TOO GOOD FOR REPRODUCTIVE PURPOSES

If you should go into any other line of production you would inquire most carefully as to

the quality of your stock. If making a start with livestock you wouldn't use for reproduction, stock which had been sent to market for killing purposes, would you? No indeed! You would in each instance look up the ancestry of the stock wanted and insist that the blood lines be pure on one side of the fence at least—if not on both.

The poultryman cannot afford to be careless in the quality of his chicks. He knows that **proper care alone** is not sufficient and the strain of chicks is fully as important to a profitable business. Chicks from high-yielding parentage produce as their ancestors did.

The dairyman, the livestock farmer, the potato grower, the grain farmer, if successful, must be just as particular in their purchases of foundation stock for breeding or seeds for sowing as the poultryman.



BALDWIN TREE NO. 2. PARENT SUPER-SELECTED STRAINS.

Photographed by Professor R. H. Roberts of the University of Wisconsin during his recent visit to observe and study the work of our Research Department in charge of Roy E. Gibson, of South Haven, Michigan.

Fruit growers please note type of this tree in comparison with Baldwin Tree No. 4 on opposite page. Tree No. 2 shown above is of the low, spreading, pyramidal shape—characteristics to perpetuate as well as productivity because of economical picking, spraying, etc., in actual orchard practice.

This tree, selected as a "Parent" tree for Greening's Super-Selected Strain of Baldwins, was set in 1908. Began bearing in 1917. Bears annually. Total yield, 1917 to 1921, inclusive, sixty-eight bushels and forty-nine pounds.



Any cow will not do—any hog will not do—any seed potato will not do—any grain for sowing will not do.

Mr. Fruit Grower—should any apple tree, pear tree, peach tree or other fruit trees do for you?

LUTHER BURBANK, THE WORLD'S GREATEST AUTHORITY IN HORTICULTURE, BELIEVES IN BUD SELECTION

We want you to read a letter received from Mr. Luther Burbank, of Santa Rosa, California, who is the greatest practical authority in the world on horticulture, and is universally recognized as such. Mr. Burbank says:

The Greening Nursery Co., Santa Rosa, Calif.
Monroe, Michigan. Nov. 13th, 1924.

Attention E. G. Greening.

Gentlemen:

Although my time is priceless far beyond expression, I am delighted when I can be of service, and would say that the matter of "bud selection" is receiving a great deal of attention in California with the more intelligent, progressive and honest nurserymen during the past several years. It is only a matter of time when ALL growers will select their trees from a nursery which select their buds with care and discretion.

Respectfully yours,
(Signed) **LUTHER BURBANK.**

MILLIONS OF DOLLARS MADE CALIFORNIA FRUIT GROWERS BY THE WORK OF A. D. SHAMEL! READ WHAT FOLLOWS:

There is no doubt as to the great profit which will accrue to YOU by planting trees propagated from a known parent.

The first practical results in bettering fruits were secured by Mr. A. D. Shamel, Physiologist of the Bureau of Plant Industry, United States Department of Agriculture. A detailed report of his work is published by the Department as Bulletin No. 623, and he made such gains in the quality and productiveness of citrus fruits in that state that the California Nurserymen's Association have continued it and have now added **DECIDUOUS FRUITS** as well!

We reproduce below a letter written by Mr. Shamel to Mr. Gibson, who has charge of our Research Department in "bud selection," and you will see he fully believes great good will come through the selection of buds and propagating trees from a known parent:



BALDWIN TREE NO. 4. CHECK TREE USED IN OUR RESEARCH WORK.

This Tree No. 4 is used as check tree in our Research Work and photographed by Professor R. H. Roberts during his recent visit to observe and study the work we are doing in Bud Selection. Note, in comparing this Tree No. 4 with Tree No. 2, shown on opposite page, that Tree No. 4 above is of the tall, pyramidal type and that it is not so productive nor would it be so economical to spray or pick the fruit. This tree was set in 1908. Yielded 60 pounds of fruit in 1917 and a total yield of thirty bushels and ten pounds in five years!



A PARENT OR MOTHER TREE FOR OUR SUPER-SELECTED STRAINS.

Blood tells in horticulture as sure as in the genus homo. That like produces like is proverbial. The exceptions only prove the rule. Here is Northern Spy tree No. 29, a record of which we have in our Research Book of Records. Trees used for cutting propagating wood are judged and selected on their performance only. The tree above is in the famous Northern Spy orchard of Farley Bros., at Albion, Michigan.

**UNITED STATES DEPT. OF AGRICULTURE
BUREAU OF PLANT INDUSTRY**

Riverside, Calif.
Sept. 26th, 1923.

Horticultural and Pomological
Investigations.

Mr. Roy E. Gibson,
South Haven, Michigan.

Dear Sir:

My friend, Mr. C. G. Woodbury, has written me of your interest in and work with individual fruit tree performance records. I am greatly interested in this subject and desire to keep in as close touch as possible with men who are working along this line. I would like to be of service to you in this connection in any way that lies in my power.

We are carrying on our work with the citrus fruits and have reached the point where we are beginning to prepare some of our progeny data for publication. It takes a long time to get these papers through the Department routine and it may be some time before any of them appear as published reports. In the meantime, I would like you to know that we have unquestioned data that quantity of citrus fruits is transmitted by budding the same as variations in shape, size, color, texture and other important fruit characteristics. As you probably know, the opponents of bud selection retreated to the position that quantity of fruit is not an inherent characteristic that can be transmitted through budding. The Ottawa experiments with apples, as well as our progeny study of citrus varieties, prove that quantity is transmitted through budding.

We are also working on problems of bud selection in the sugar cane and pineapple crops of Hawaii. We have gone far enough in the sugar

cane work to feel sure that bud selection is as important there as it is in the citrus. Similar indications in the pineapple selection studies indicate that bud selection is a primarily important factor in isolating and propagating uniformly good strains of the pineapple. A number of somewhat related studies of ornamental plants and flowers add to the impressive evidence which is accumulating as to the importance and value of bud selection in plants that are propagated vegetatively.

If we can be of any service in the way of studying or analyzing your data and observations, or in any other way, we would be glad to offer our service in this connection.

With best regards, I am,

Very truly yours,

(Signed) A. D. SHAMEL,
Physiologist.

Again referring to Bulletin No. 623, published by the United States Department of Agriculture, Mr. Shamel said:

"The isolation of valuable strains through bud selection is of vital commercial importance. The propagation of trees of the valuable strains will result not only in increased production, but what is equally important, uniform production of improved crops of fruits of greater commercial value. From this standpoint the isolation of the best strains is of importance, not only to the grower, but to the consumer as well."



The cut above was made from a photo taken of the peach orchard of Mr. J. H. Behnken, Somerset Center, Michigan, in 1916, just forty months after planting. We furnished the 2,000 trees necessary to plant this orchard, and of that number only one failed to grow. We offer this as evidence that our stock makes good. In propagating we use buds taken only from high-producing trees of quality fruit. Read pages 20 to 25 in this connection.

READ THE OPINION OF TWO LEADING DECIDUOUS FRUIT CROWERS ON "BUD SELECTION."

At the mid-winter meeting of the Michigan Horticultural Society, held in Grand Rapids from December 5th to 9th, 1922, Mr. George Hawley, its President, in his opening address said: "The whole fruit growing business is founded upon the work of the nurseryman. What he sows we reap. The great bulk of the trees are raised and distributed by average men of honesty and integrity, whose business is raising and distributing trees—not growing fruit. The great bulk of fruit trees distributed are of parentage buds taken from growing nursery stock. Back somewhere the original parent bud was taken from a fruit bearing tree. Where that tree grew, when that bud was taken, or what type of fruit that tree bore, are matters of vital concern to you and me. We demand the pedigree of our cattle, sheep and hogs, when the individuals in all their perfection are before us. Is it not of more importance that we demand the pedigree of a little tree, whose characteristics cannot be determined for years?"

BUD SELECTION WILL ELIMINATE "DRONE" TREES

In the 49th Annual Report of the Michigan State Horticultural Society issued January 1st, 1921, is a reprint of a talk given before that

society by W. H. Cutback of Flint, Michigan, on "The Importance of Bud Selection." Among other things, Mr. Cutback said: "By organized demand we could dictate to the nurserymen that we want pedigreed apple, peach and other trees and demand it. Surely the best is none too good. We could thus build up our orchards and **get rid of the boarders**, and have only producing trees in them."

THERE IS NO GUESSING IN OUR TREE PERFORMANCE RECORD

There has been too much taken for granted by fruit growers. Very few have kept a record of their individual trees, and when a tree yielded a small amount of fruit in a certain year would say "it is an off year for the tree," forgetting its yield the previous year, taking it for granted that it would probably bear a full crop the next year. But we have found that there are "drone" trees in all varieties, and, as proven by the work of Shamel and others, a tree which is a good producer is always a good producer, and a poor producer is always a poor producer.

PRODUCTIVENESS, HARDINESS, EARLY BEARING, SIZE AND COLOR ARE TRANSMITTED BY BUD SELECTION

As an illustration of hereditary influence, we note in the Rural New Yorker issue of November 22nd, 1924, a photographic reproduction of a Baldwin apple, which was one of a



half-dozen sent that publication by Mr. Harvey Losee of Dutchess County, New York. The Rural New Yorker says: "Mr. Losee obtained buds from a Mr. Tetor, and that they were cut from a tree which had produced a large crop of big apples, and as Mr. Losee expected, these buds carried the habit of the parent tree. Mr. Losee believes that striking characteristics of this tree carried on through the bud and as the parent tree in Mr. Tetor's orchard always bears large apples, Mr. Losee's tree bears large apples, too."

We give this illustration to emphasize our contention that practical fruit growers believe in bud selection and are getting results and the SUPER-SELECTED strains we offer taken from parent trees that have proven their worth are more desirable in every way than ordinary trees.

WE WERE THE FIRST TO BEGIN SYSTEMATICALLY THIS RESEARCH WORK

Twenty years ago impressed with the idea of renewing the strains of fruits grown by us because of mixtures then prevailing in nurseries everywhere, we began our research work in "bud selection."

Mixtures were then prevalent in peaches, cherries and apples, and Mr. Chas. Greening personally visited a number of the largest nurseries during the growing season where he discovered many mixtures that were in most cases unknown to the nurserymen and this same condition existed in our own, unknown to us. We determined to immediately correct this evil to prevent all varieties of trees becoming mixed.

As it is customary with nurserymen to obtain scions frequently from other nurseries in case of shortage or failure in the propagation of a certain variety, thus the nursery who received the buds unconsciously created a mixture in their own nursery, which invariably was not discovered until the trees began to bear in the orchards.

To correct this we began the work of securing buds from selected trees and employed students from the Agricultural College at that time, also some of our own experts at the nursery who went out and searched for the trees

having the best records, obtaining the buds and sending them to the nursery for a new strain to be started true-to-name and of select strain. Fruit growers, members of Horticultural Societies and others cheerfully co-operated with us, pointing out in many instances certain trees of high record from which they had frequently taken specimens of fruit for exhibition.

Leading horticulturists every where offered their assistance during those days, making it possible for us to secure a select strain from bearing trees absolutely reliable and true to name. Thus we changed as rapidly as possible our entire stock of fruit trees, and for the first time in our history we were certain that our varieties were bearing true-to-name and of select strain.

SYSTEMATIC RESEARCH DEPARTMENT ORGANIZED IN THE YEAR 1916

We were the first to start a Research Department systematically carried on at considerable expense. Mr. Gibson was put in charge of this Department. We met with opposition at the beginning, some members of the horticultural profession claiming a water sprout bud taken from an ordinary tree to be as good in every way as the one taken from a bearing tree of high performance record. The folly of this theory has been fully proven even to those who were in doubt.

Should you be interested in our SUPER-SELECTED stock, please write us for our special circular on this stock which contains photographs of trees selected for "parents" and their yield taken from our PERFORMANCE RECORD, containing the full history of all the trees we have under observation. We know the parentage of every tree in our nursery and Mr. Gibson personally visits the best orchards in many states working mostly in the fruit districts of Michigan, where he has trees of all varieties and every description under observation and of which he keeps an exact record. While our regular line of nursery stock is propagated from high producing trees, characteristic of the variety we wish to perpetuate, yet our SUPER-SELECTED stock contains only those that are very remarkable and the circular we mention will give you particulars.

The expense of growing an orchard of
SUPER-SELECTED TREES
is no greater, but the net returns are.



Mr. Roy E. Gibson

In Charge of Department of Research Work

Mr. Gibson is well known to the large fruit growers of the country. He has been with us since 1902. He has a truly scientific mind—in that he is open to conviction on all points. He is neither dogmatic nor positive and those of you who have the pleasure of Mr. Gibson's acquaintance will vouch for his exceedingly great knowledge of our vast industry and the honesty of his purpose in our research work.

Mr. Gibson believes from his observations that the possibilities in breeding trees from high producing stock will result in many millions of dollars profit to the fruit growers of the United States. We are proud to have a man of his character and ability associated with us.

Professor C. P. Halligan of the Michigan Agricultural College, than whom there is no better authority, has this to say:

"I have had the pleasure of visiting Mr. Gibson of South Haven, Michigan, who has been making tree records for you and furnishing you buds and scions from these records for the propagation of young stock, and I am very much interested in the work he is doing. I realize that stock propagated from such record

trees is a great insurance on permanence and the desirableness of the fruit of young trees propagated from such selected parents. It is

very reasonable in these days of scientific breeding to expect that trees to produce fruit of the most desirable type of the variety should be selected for propagation."



Mr. Roy E. Gibson.

Mr. Gibson personally looks after the selecting of trees of highest performance records throughout the vast area of orchard territory in Michigan and elsewhere. Only such trees as have shown a distinctive superiority in quality, color, size, productiveness are selected for this purpose. The trees are given a number, painted on the tree, and a record is kept on books especially printed for our research purposes. All data concerning the performance of such trees are carefully recorded during the entire Summer months. From the tree of any variety selected having the best performance record, the buds are taken, a new

strain is started in the nursery and the old strain discarded. A complete record of every SUPER-SELECTED variety is kept on file in the Greening office for the inspection of anyone interested.

**Mongrel Fruit trees may pay-but
Super-Selected strains pay doubly.**



The Commercial Apple Orchard is a Certain Profit Maker.

Apples, King of Fruits

The Apple is justly named the "King of Fruits" and eaten with a relish through the seven ages of man. In its long continuance throughout the year and in its various uses it possesses an importance not equalled by any other fruit. It is the longest keeping fruit known in storage, and with a list of well selected varieties one can have fruit the year round, it not being difficult to keep Apples in common storage until strawberries are in season. Many good Apples in one section are not so good when grown in another, therefore, more important than any one thing is the selection of right varieties. We have tested all the worth-while varieties grown in the United States, and have discarded many but have retained some because of their excellence for home use which are not desirable for commercial purposes.

We state in the description of each variety the good qualities as well as the faults and you can depend on safely following the description given.

Summer Apples

EARLY HARVEST.—Earliest Summer Apple, pale yellow, sub-acid and very good in quality, medium sized. Thrifty, productive, long lived. It should hold a welcome place in every home collection. Season for eating, late July and August.

GOLDEN SWEET.—Clear yellow, sweet Apple. Very good quality. An excellent home use variety. Eating season, mid-August to late September.

RED ASTRACHAN.—The very best early red Summer Apple of sub-acid flavor. Beautiful in color and shape. Flesh fine grained, crisp, tender, juicy and of sub-acid flavor. Good grower, coming into bearing rather young. Reliable cropper. An excellent variety for home use or local market. Eating season, late July to September.

SWEET BOUGH.—Acknowledged by all to be the very best Summer sweet Apple; flesh tender, of honey sweetness, excellent quality. Eating season, August and early September. Fruit large and handsome, smooth, pale yellow, sometimes faintly blushed. One of the best Summer Apples for home orchard or for local trade.

YELLOW TRANSPARENT.—This is one of the best extra early Apples, being excellent for culinary uses and dessert. Apple sauce made from this variety is not equalled by any other sort. Ripens earlier and is a more reliable cropper than Early Harvest. Excellent for the home or commercial orchard. Fruit medium or above medium, sometimes large, uniform in shape and size. Skin smooth, waxy, pale greenish yellow changing to an attractive yellowish white. Flesh moderately firm, fine grained, crisp, tender, juicy, sprightly, sub-acid with a pleasant flavor, good to very good. Season late July and August. **Our Super-Selected strain of Yellow Transparent is very superior.**



Yellow Transparent Apple.



Autumn Apples

ALEXANDER.—Fruit very large, of an attractive red color. Suitable especially for culinary purposes. Quality fair. Eating season, September to early November.

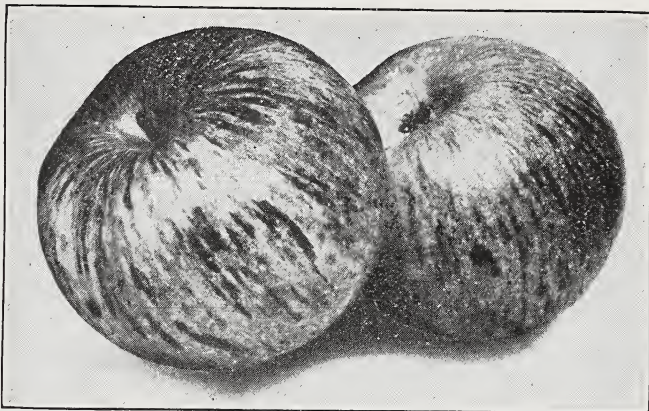
ENGLISH RAMBO.—A very much larger and better Apple than the ordinary Rambo. It is really an improvement and a very valuable hardy Apple. Color, streaked and marbled with dull yellowish red on pale yellowish ground, dots large, whitish. Flesh tender, rich, mild sub-acid, fine flavored, often excellent. Does well in all localities. Late Autumn.

CHENANGO (Chenango Strawberry).—In its season Chenango is the Apple of Apples in taste, odor and appearance. Size medium to large. Color yellowish white, but entirely over-spread with an attractive pinkish red, striped with black and bright carmine. An early and regular bearer. Very profitable Apple to grow for local and special markets. Quality very good. Eating season, latter part of August and September.

FALL PIPPIN.—Of beautiful golden yellow color, large and uniform. Tender, rich, of best quality, excellent for dessert and culinary purposes. Fruit ripens unevenly. Flesh whitish or tinted with yellow. Very juicy, agreeable, sub-acid, somewhat aromatic of the very best quality. Eating season, September to December.

GRAVENSTEIN.—All lovers of fruit value Gravenstein because of its crisp, tender, juicy flavor and aromatic odor. Recommended for the home orchard. Usually not a profitable Apple to grow in a commercial orchard. Skin thin, tender, greenish yellow to orange, overlaid with broken stripes of light and dark red giving it a red appearance. Flesh yellowish, firm, moderately fine, slightly sub-acid, quality very best. Eating season, early September to late November.

LATE STRAWBERRY (Autumn Strawberry).—Small to medium size, excellent quality, sub-acid. Color bright striped red. Flesh yellowish white. Eating season September to December. Long period of ripening, only requiring a number of pickings. Excellent for home use.



Oldenburg Apples.

MAIDEN BLUSH.—A beautiful pale lemon-yellow color with crimson cheek. Comes into bearing young and is a reliable cropper. Fruit medium to above average, oftentimes large; uniform in size and shape. crisp, tender, very juicy, sub-acid. Excellent in quality. Eating season, September to November.

OLDENBURG (Duchess).—One of the best general purpose Apples, in its season. A profitable commercial variety as well as a good home use variety. Excellent culinary qualities. Tree unusually hardy, vigorous, very reliable cropper. Fruit hangs well to the tree till ripe. Very uniform in size and quality. Small percentage of loss from unmarketable fruit. Fruit medium to large averaging above medium. Skin moderately thick, smooth. Prevailing effect, red striped. Attractive. Flesh, yellow, firm, slightly sub-acid, aromatic. One of the best cooking Apples in our entire list. Eating season, August to September.

TWENTY OUNCE.—Large size, uniform shape and color. Grown in the commercial orchard for baking purposes. Not especially good for dessert purposes. Stands shipping well. Flesh whitish, somewhat tinged with yellow, coarse, moderately tender, juicy, sub-acid, excellent for culinary use. Second rate for dessert. Eating season, late September until early Winter.

Winter Apples

ARKANSAS (Mammoth Black Twig).—Fruit very large. Color deep red, nearly black. Tree hardy and very productive. Very valuable in the West. Good cropper. Season, November to April.

ARKANSAS BLACK.—Beautiful dark red, late keeping and of very good quality, demanding a good price in the market. Fruit medium and very uniform in size and shape. Season, December to April or later.

BAILEY SWEET.—Distinctly sweet, of very good quality, averaging medium in size. Prevailing color bright red upon a yellow background. Flesh tinged with yellow. Firm, partially juicy to juicy, slightly sweet, very agreeable in flavor. Keeping qualities below average. Season of eating, October to January.

BALDWIN.—Pre-eminently a leading variety for commercial orchards in the southern peninsula of Michigan, northern part of Ohio and state of New York. Not only is Baldwin a standard fruit on the American market but is one of the leading Apples used for export trade. One of the principal varieties handled in cold storage. Tree, a strong grower but somewhat slow in reaching bearing age, but by our bud selection work we have greatly reduced the age at which Baldwin comes into bearing. Fruit large to very large, uniform in size. The skin of fruit is tough, smooth and when well grown attractive in color. The flesh is yellowish, firm, coarse, crisp, rather tender, juicy to very juicy. Agreeably sub-acid. Somewhat aromatic. Quality good to very good. Season November to March or April; to May or later in cold storage. Well adapted for general market. **Our Super-Selected strain is much superior to ordinary Baldwin.**



Baldwin Apple.



Delicious Apple.

BEN DAVIS.—A poor eating Apple, but one of the best keeping and cooking Apples grown. Season January to June. The tree is very hardy, comes into bearing at an early age and bears tremendous crops. The skin of the fruit is tough, waxy, bright carmine color with a yellow background. The flesh is whitish, slightly tinged with yellow. Firm, moderately coarse, not very crisp, moderately sub-acid, fair in quality.

BLACK BEN.—A beautiful dark red Apple similar in size and form to the Ben Davis of which it is either a seedling or bud mutation. This is a valuable commercial variety in the Southwest. Season December to April.

CANADA RED.—See the Improved Steele's Red.

DELICIOUS.—This is a large Apple with a surface almost covered with a brilliant dark red blending to golden yellow at the blossom end. The tree is hardy, healthy and vigorous and bears regular annual crops. The flesh is fine grained, crisp and melting, juicy, delightfully aromatic, moderately sub-acid to give a pleasing flavor. Quality very good to best. Keeping qualities good.

ENSEE.—A seedling of the Rome Beauty. Fruit better color and considered a better dessert Apple. Tree growth and bearing habits are practically the same as the Rome Beauty. Fruit large, rounded, covered with bright red. Season, November to February.

ESOPUS (Spitzenberg).—An excellent home orchard variety of good color and flavor. A good keeper, fruit medium to large, uniform in size and shape. Skin is tough and waxy, slightly russet, prevailing color a bright colored red with stripes of darker red, the flesh is yellow, moderately fine, crisp, quality very good to best. Season, November to February.

FAMEUSE (Snow).—A very well and favorably known dessert Apple, beautiful in appearance, of medium size. The skin is thin, tender, smooth, bright red deepening to almost purplish black in highly colored specimens. The flesh is very white, very tender, juicy, sub-acid, becoming very mild sub-acid to sweetish; aromatic, very good dessert Apple but not recommended for culinary purposes. Fruit hangs well to the tree, having quite a number of small Apples, too small for market. The small ones, however, are excellent for sweet cider. Eating season, October to midwinter.

FALLAWATER (Tulpahocken).—Fruit large to very large, globular, attractive in size and shape. Tree usually a good regular bearer. Color a pinkish red on a yellow background. Flesh is tinged with yellow or green, crisp, coarse, moderately tender, moderately sweet. Quality fair. Season, November to March or April. Desirable only for cooking and market.

GANO.—Superior to Ben Davis of which it is a variety. The fruit is medium to somewhat large, uniform in size and shape. The skin is smooth, waxy, pinkish red often deepening to purplish red more or less striped. The flesh is whitish, firm, moderately tender, rather coarse, moderately crisp, mild sub-acid, good or nearly good in quality. Tree a very vigorous grower and prolific bearer.

GIDEON.—Fruit above medium to large. Color, an attractive deep yellow or greenish, mottled and blushed with orange-red; irregularly splashed with carmine. Flesh yellow, moderately firm, crisp, somewhat coarse, juicy, aromatic, mild sub-acid eventually becoming sweet. Good to very good. Tree vigorous and hardy. Almost an annual bearer. Season, November to April. Fruit should be picked before it ripens. It is then an excellent cooking Apple.

GOLDEN RUSSET.—Fruit below medium to above in size. Color, green or yellowish russet, becoming golden russet with bronze cheek. Flesh yellow, rather fine grain, moderately crisp, tender, juicy, rich agreeable sub-acid, aromatic. Very good. Particularly desirable for home use during the Spring months, being then excellent for dessert and culinary uses. The tree is hardy and a biennial bearer. Season December to April or later.

GREENING.—See Rhode Island Greening and Northwestern Greening.

GRIMES GOLDEN.—Fruit medium to large. Color clear deep yellow with scattering pale yellow or russet dots. Flesh yellow, very firm, tender, crisp, moderately coarse, moderately juicy, sub-acid, rich aromatic and sprightly. Very good to best. Excellent for either dessert or culinary uses. It is a biennial bearer and good cropper, subject to collar-rot and should be double grafted for best results. Season November to February. One of the best pure yellow Winter Apples. Fine for the commercial as well as the home orchard.

HUBBARDSTON.—Fruit above medium to large, sometimes very large. Color, yellow or greenish, blushed and mottled with red which varies from dull brown to bright red and is more or less marked with deep carmine. Flesh white, slightly tinged with yellow. Moderately firm, rather fine grain, tender, moderately crisp, juicy, aromatic, rich and very sprightly, but becoming moderately sub-acid mingled with sweet. Very good to best. Excellent variety for commercial planting. Season, October to January.



Grimes Golden Apple.



Jonathan Apple.



Northern Spy Apple.

JONATHAN.—Fruit medium to small, rarely large. Color pale yellow, overlaid with red, striped with carmine. When well colored always completely covered with red, which deepens to purplish on the sunny side. Flesh white or sometimes with tinge of red, firm, crisp, tender, juicy, very aromatic, sprightly sub-acid. Very good to best. In all, a very beautiful Apple, high-flavored, of excellent quality either for dessert or culinary uses. One of the most desirable varieties for the fancy trade at the Holiday season. Reliable biennial cropper, coming into bearing rather young. Season, November to January.

KING.—See Tompkins' King.



McIntosh Apple.

KING DAVID.—Hardy, productive, vigorous and healthy. Apples about size of Jonathan. Beautiful, solid dark red color. Uniform size. Flesh firm, fine, crisp, tender, spicy and juicy. Its fault is tendency to decay at core, especially when over-ripe. Quality good to very good. November to February.

MAMMOTH BLACK TWIG (See Arkansas.)

MCINTOSH.—This variety in quality as well as appearance and uniformity of fruit cannot be surpassed by any. It is undoubtedly sovereign of all in the minds of those who enjoy Apple fruit. Resembles the Fameuse but is larger, fully equal to it in quality. The fruit is above medium to large, highly perfumed. The color is a brilliant crimson with a polished yellow background. Quality of the very best. Season, November to February. One of the very best varieties for commercial purposes as well as for the home use. *Our super-selected strain in this variety is a great improvement over what the McIntosh has been in the past, especially as to color and bearing proclivities.*

We have the McIntosh in Super-Selected strain, which is a marked improvement over the usual McIntosh.

NORTHERN SPY.—Fruit large and attractive. Color of bright red overspread with delicate bloom. Flesh very juicy, crisp and tender and most excellent for either dessert or culinary uses. Well adapted for local, general or fancy trade. Of well established reputation and because of its size, beauty, fine flavor and high quality, sells for more than average prices. Ready for use in November, and retains crispness and high flavor until the close of the season. *In our bud selection work we have found a strain which comes into bearing at six years and has borne an annual heavy crop since. Season November to March. Our Super-Selected Northern Spy is distinctly superior to the ordinary Northern Spy.*

NORTHERN SPY-RED STRAIN.—This strain of the Northern Spy is red but otherwise same in every respect as the streaked Spy. In ordering, if the Red Spy is wanted be particular to mention it or the regular or streaked Spy will be sent.

NORTHWESTERN (N. W. Greening)—Fruit large or very large. Color, clear pale yellow or greenish, sometimes faintly blushed. Flesh tinged with yellow, medium in texture, firm, juicy, slightly aromatic, mild sub-acid. Quality good. Tree grows with rapidity and vigor and in time becomes a reliable and prolific producer. A very important variety for the fruit growing interests in Wisconsin and Minnesota because of its extreme hardiness. Season of eating, January to June.



Greenings Big Nurseries

OAKLAND (Oakland County Seek-No-Further).—A mildly sweet Apple of good medium size, attractive dark red color, pleasant flavor and good quality. In common storage it is in season from late November to midwinter or later; in cold storage it may be held till April. This for many years has been a popular variety in Oakland County, Michigan, where it probably originated. In 1883 it was brought to the notice of the American Pomological Society by Charles W. Garfield and was entered upon the list of that Society's catalog as a promising variety in Michigan.

ONTARIO.—Fruit large, uniform. Shaped like the Wagener with color of the Northern Spy, its parents, but like both in flavor and color. Quality good to very good. Season, November to March.

OPALESCENT.—A most beautiful, large shapely Apple, uniform in size. Color very brilliant red on yellow background. Tree hardy, vigorous and productive, holding its fruit well to the tree. Flavor good to very good. Eating season, November to March.

PEWAUKEE.—A fine variety to plant where extreme hardness is required. Fruit medium to large, uniform in size. Color green to lemon-yellow, sometimes mottled with orange or red, stripes or splashes of carmine often covered with a purplish blue. Flesh white, firm, slightly coarse, sub-acid, slightly aromatic. Flavor, fair to good. Tree very vigorous and a reliable cropper. Eating season, January to May.

PUMPKIN SWEET.—Prof. Hedrick says in his Cyclopedic of Hardy Fruits: The Pumpkin Sweet is the standard sweet Apple of the season. Esteemed for baking, canning and stewing, but too coarse for dessert. Sometimes known as the Pound Sweet. This variety suffers from Winter-injury and sun-scald. Color greenish yellow, sometimes bronzed on cheek but never marked with red or russet except about the cavity. Flesh yellow, firm, crisp and juicy, sweet with a peculiar flavor; good. October to January.

RAMBO.—Fruit medium, color pale green to yellow, mottled with red, mixed with grayish blue. Flesh white, tinged with yellow, fine grained, crisp, tender, juicy, sub-acid, aromatic. Quality very good. A home orchard variety. Season, October to January.

RED SPY.—See page 29.



Rome Beauty Apple.

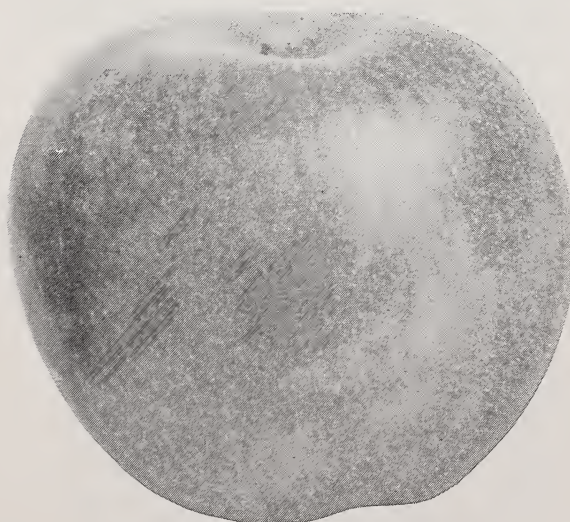
RHODE ISLAND GREENING.—Our finest green Apple, color a light green to mellow shade of yellow with dull blush or occasionally a pale red cheek. Fruit large, fine grained, symmetrically rotund, uniform in size and shape. Ranks very high among dessert Apples and for culinary purposes is unsurpassed. Flesh tender, very juicy. Flavor is rich and pleasing. When fully ripe gives off a delightful aroma. Tree very vigorous, long-lived, yielding moderate to very heavy crop biennially. Eating season, December to March.

ROME BEAUTY.—Large, smooth, handsome, uniform in size and shape. Thick skin, therefore ships and keeps well. Grown extensively by some fruit growers as a dessert Apple because of its good quality and appearance. Thrives best in Ohio and Indiana, southern Michigan and southern New York. Tree very vigorous, coming into bearing early with a heavy crop annually. Because of its long stem and flexible branches, the fruit remains well on the tree during high winds. Eating season, November to February.

ROXBURY RUSSET.—A notable keeper, the sugar content of this Apple is remarkably high, making this about the best sort for cider. Fruit medium to large. Russet or greenish yellow. Flesh greenish white, rather granular, slightly crisp with rich sub-acid flavor. Keeps well throughout the northern states. Reliable cropper. Quality very good. Eating season, December to May or even to July in cold storage.

SHIAWASSEE.—A seedling of the Fameuse variety of good keeping quality. Fruit medium. Color deep brilliant red or greenish yellow brown. Flesh firm, very white. Crisp, juicy, refreshing sub-acid, aromatic. Very productive. Tree resembles Fameuse but a more slender, upright grower. Eating season, October to January.

STARK.—A very vigorous, hardy, healthy, productive tree accommodating itself to most soils. The fruit is large, smooth, well-shaped, beautiful form and keeps well. Its color is dull green and red but in highly colored specimens red. Flesh yellowish, fair, moderately fine, slightly coarse, juicy, tender, crisp, mildly sub-acid. Flavor good or nearly good. A reliable cropper and very productive. Succeeds in regions where Baldwin does well and also beyond the ranges of profitable cultivation of Baldwin. Eating season, January to May.



Rhode Island Greening Apple.



STAYMAN'S (Stayman's Winesap).—A variety of the Winesap resembling it in tree and fruit but excels in the size of fruit as well as the flavor. Tree is very productive and adapted to a wide range of soil and climate. It is a splendid variety for Pennsylvania, southern Illinois, southern Michigan and Ohio. Fruit medium to large, uniform, color greenish yellow, completely covered with dull mixed red and indistinctly splashed with carmine. Prevailing color red. Flesh tinged with yellow, slightly greenish, moderately fine grained, tender, moderately crisp, juicy to very juicy, aromatic, mildly sub-acid. Tree a vigorous grower of spreading habit coming into bearing early and a reliable annual cropper. Very valuable variety for home use and commercial orchards. Eating season, December to May.

STEELE'S RED (Sometimes called Canada Red or Red Canada).—A long keeping market Apple with excellent, good color, this variety is unsurpassed, brings one to two dollars per barrel more than any other Apple. Fruit well formed, very fine grained, juicy, aromatic, agreeably sub-acid. Size of fruit medium to large, shapely, uniform, cone-shaped; color a beautiful deep red, striped with deeper red on a background of yellow. Sometimes conspicuously marked with gray colored dots. Flesh whitish with yellow or greenish tints, firm, crisp, rather fine grained, agreeable sub-acid flavor. Quality of the best. Very valuable for commercial purposes. The only drawback to this variety has been its slow growth but by the Greening method of top-grafting it in the nursery on a hardy fast growing Gideon stem and French crab root, we have completely overcome the slow growing characteristics. By top-grafting it will come into bearing as quickly as any good standard variety of Apples. Fruit growers who have planted it have reaped large profits and our demand for this type of tree has greatly increased.

SUTTON (Sutton Beauty).—Medium to large, uniform. Very attractive bright red. Flesh firm, fine grained, crisp, tender, juicy and mildly sub-acid. Flavor very good. Good for dessert purposes but not very desirable for culinary uses. Season, November to April.

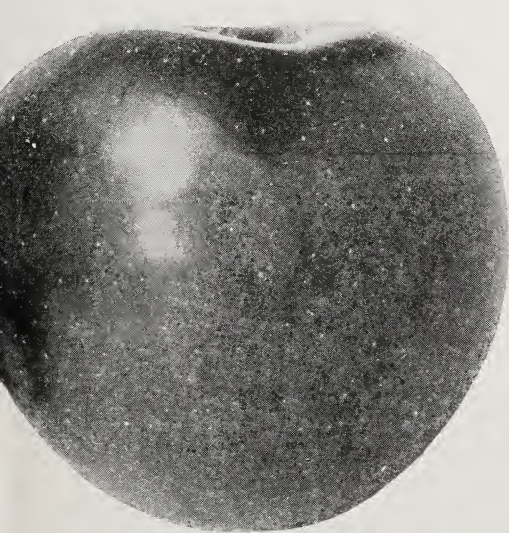
TOLMAN SWEET.—Our best Winter sweet Apple, size medium uniform color, pale yellow, flesh white, firm, moderately fine, moderately juicy. Quality very good, decidedly sweet. A regular bearer yielding good crops biennially. The most valuable yellow sweet Apple for commercial use. Eating season, November to March.



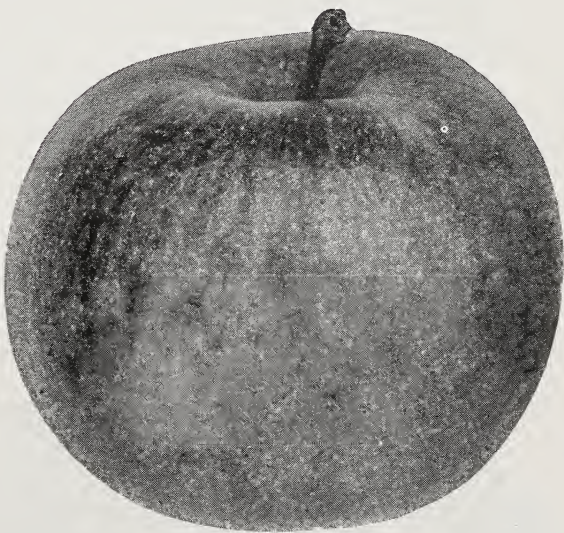
Steele's Red Apple.

TOMPKINS' KING.—Fruit large to very large, uniform in size and shape. Color fine yellow mottled and washed with orange-red, often shaded to lively red, striped and splashed with bright carmine, dots rather numerous, conspicuously white or russet. Prevailing color attractive red over yellow. Flesh yellowish, coarse, crisp, tender, aromatic, juicy, sub-acid. Quality very good to best. Tree rather slow about coming into bearing, but when mature becomes a regular bearer, yielding light to heavy crops biennially. Valuable for home and commercial use. Season, November to March.

WAGENER.—Comes into bearing earlier than any other variety listed herein. Tree dwarf to medium size in growth. Valuable variety as a filler in commercial orchards. Fruit medium to rather large, color pinkish red, striped with carmine over a pale yellow background. Prevailing color light red, flesh white, fine grained, tender and very juicy, sub-acid. Quality very good to best. Season, October to February.



Stayman's Winesap Apple.



Wagener Apple.



Wealthy Apple.

WEALTHY.—Fruit large size, roundish. Skin smooth, marked with dark red. Flesh, white, tender, juicy and sub-acid. Season, November to January. This is one of the finest varieties of its season and is especially good for commercial purposes as it comes into bearing early. Very profitable as a market Apple on account of its handsome appearance and good flavor.

WESTFIELD (Seek-No-Further).—Fruit medium, sometimes below. Color, rather deep yellow or greenish, shaded and splashed with dull red, but in highly colored specimens, largely overspread with bright pinkish red, striped with deep carmine. Dots large and conspicuous, pale yellow, grayish or russet. Flesh slightly tinged with pale yellow, firm, moderately grained, crisp, tender, breaky, juicy, mild, subacid, rich, peculiarly aromatic, sprightly. Very good to best. Tree vigorous and hardy. Little value for cooking but an old favorite dessert Apple. Season, November to March.

WINESAP.—Fruit medium, uniform in size and shape. Color a bright deep red. Flesh tinged with yellow, coarse, very juicy, quite sub-acid. Flavor good to very good. Season, December to May. Very valuable on account of its wonderful keeping qualities.

WINTER BANANA.—Fruit large to very large. Skin smooth, moderately thick, waxy, bright pale yellow, often with a blush, which in well-colored specimens deepens to a dark pinkish red. Dots numerous, whitish and submerged or with fine russet effect. Prevailing effect yellow with a pretty contrasting blush. Flesh whitish tinged with pale yellow, moderately firm, a little coarse, somewhat crisp, tender, juicy, mild sub-acid, distinctly aromatic. Good to very good. Tree a vigorous grower and a remarkably early bearer, yielding moderate to very heavy crops. In season from mid-November to May.

WOLF RIVER.—Fruit very large, one of the largest Apples grown. Smooth yellowish white splashed with bright red. Flesh yellowish white, coarse, tender. Flavor only medium. Exceedingly valuable as a baking Apple. Grown especially for the restaurant market. Tree very vigorous and fairly productive. Season, November to January.



Wolf River Apple.

Dwarf Apples

For back yard planting, where space is limited, the Dwarf Apple interests many. They fruit early and bear at a rate that will astonish you. May be planted as closely as 6 ft. apart each way.

We can ship the following varieties only.

W, Winter; S, Summer varieties.

BALDWIN (W).

FAMEUSE (W).

JONATHAN (W).

McINTOSH (W).

RHODE ISLAND

GREENING (W).

RED ASTRACHAN (S).

SWEET BOUGH (S).

WEALTHY (W).

WINTER BANANA (W).

YELLOW

TRANSPARENT (S).

Crab Apples

Crab Apples succeed equally well in all sections, and are valuable for preserving, jelly, cider, ornament and some of the improved varieties are excellent for eating. A valuable market fruit.

HYSLOP.—The best red Crab Apple. Large in size for that type of App'e. Color, deep crimson with a heavy blue bloom. Flesh fine, fair and astringent. A very heavy producer and a strong growing tree. The best market kind. Season, September to October.

TRANSCENDENT.—Fruit medium to large. Color, brownish yellow with blushes of carmine. Flesh firm and crisp, yellowish, fine grained, very juicy, acid. Tree is a hardy and vigorous grower. Comes into bearing early. Immensely productive. Season, September to October.

WHITNEY.—Fruit large, color yellow, striped with red, mostly covered with red on the sunny side. Flesh yellow, firm, very juicy and rich. Fruit in size and quality is equal to many Apples. Tree a vigorous and handsome grower. Season, August.





Winter Banana Apple.

The Winter Banana Apple

Highest Honorable Mention, American Pomological Society Fruit Exhibition at Philadelphia, 1889. Introduced by us in 1890

The Winter Banana Apple is now known to every fruit grower and nearly all fruit users in America. Among the many varieties of Apples there are few equals and no superiors to this wonderful fruit. We knew this when we first tasted this delicious Apple. At that time Mr. Green'ag pronounced it the most beautiful and delicious Apple that he had ever eaten or seen. This does not need to be proven to those who have grown or tested it. Merely to taste it is to be convinced. The Winter Banana is in a class distinctively its own. We want every lover of Apples to know about it. We want you to know about it and we feel that so long as there is one home orchard without it, we shall continue to place its merits before the growers and lovers of fine fruits.

History of the Winter Banana

In the early eighties Mr. David Flory of Adamsborough, Indiana, planted an orchard of fifty Apple trees. These he calculated to raise from seed, with the object in view of top-grafting them later on. Among these he discovered one that bore fruit four years after planting. The fruit was different from any that Mr. Flory had ever seen, and immediately attracted his attention. During an exceptionally cold Winter, nearly every Apple tree in his orchard was

Winter-killed, but this particular tree stood the test with no injury whatever. Mr. Flory named it the Winter Banana, on account of its wonderfully delicious flavor and aroma. The Winter Banana became noted first by these distinctions. In the year 1890 the Greening Nursery Company purchased the exclusive right to propagate the Winter Banana. Our prophecy at that time was that it would become a standard market Apple. This prophecy has been most liberally fulfilled. Today we have a new and larger vision of its possibilities, which is based on its present popularity. We believe it is destined to be one of the best known and most widely grown Apples.



An Apple of Distinctive Flavor

There is no Apple like it. Its striking beauty, its great size and marvelously perfect shape attract immediate attention. Its distinctive coloring of golden yellow, shaded by a beautiful bright red, cannot be equalled. But the taste—ah, that's the thing—a delicious, spicy and sub-acid combination distinguish it from any other Apple ever grown. To taste it is to be won by it. Many of the best hotels specify this variety for use on the table. They are often seen in restaurant windows as specimens of the baked Apples that are served within.

Wonderful Keeping Qualities

Cheboygan, Mich., Aug. 5th, 1919.

Gentlemen: I send by this mail three Winter Banana Apples grown on your trees. I should think it would make you feel chesty to see your trees doing themselves so proudly. As I stated before, these Apples were kept in an ordinary cellar belonging to my foreman, in the orchard of George H. Goodwin. I shall try and send another sample on Sept. 1st.

Yours very truly,

A. M. GEROW.

Did you ever pick an Apple off the tree, pack it away on a shelf in the cellar and then go down a year afterwards, and find it fresh and rosy and full of flavor and fit for the table? Dr. Gerow did this with the Winter Banana.

It is Advertised by Its Loving Friends

Neither Dr. Gerow nor the Greening Nursery Company are the only friends of this wonderful Apple. Read what others say:

Mr. C. H. Whittum, of Eaton Rapids, Mich., names the "Winter Banana as his best variety."

The Waldorf, New York City's famous hotel, writes us: "The flavor of the Winter Banana and its quality are superb."

Dr. L. H. BAILEY, of Cornell University, writes us: "The quality of the Winter Banana is very excellent, and it has a spicy aroma which I like very much. It certainly is a valuable variety."

D. W. Lee asks the American Poultry Journal, July, 1918, as follows: "A friend of mine has a nine-year-old Winter Banana Apple tree. He got four barrels of Apples from it this year and sold them for \$16.00 per barrel. Are they good Apples? I was going to make my leader Delicious, but when Winter Banana Apples bring \$3.00 more per barrel than Delicious, it sets me guessing."

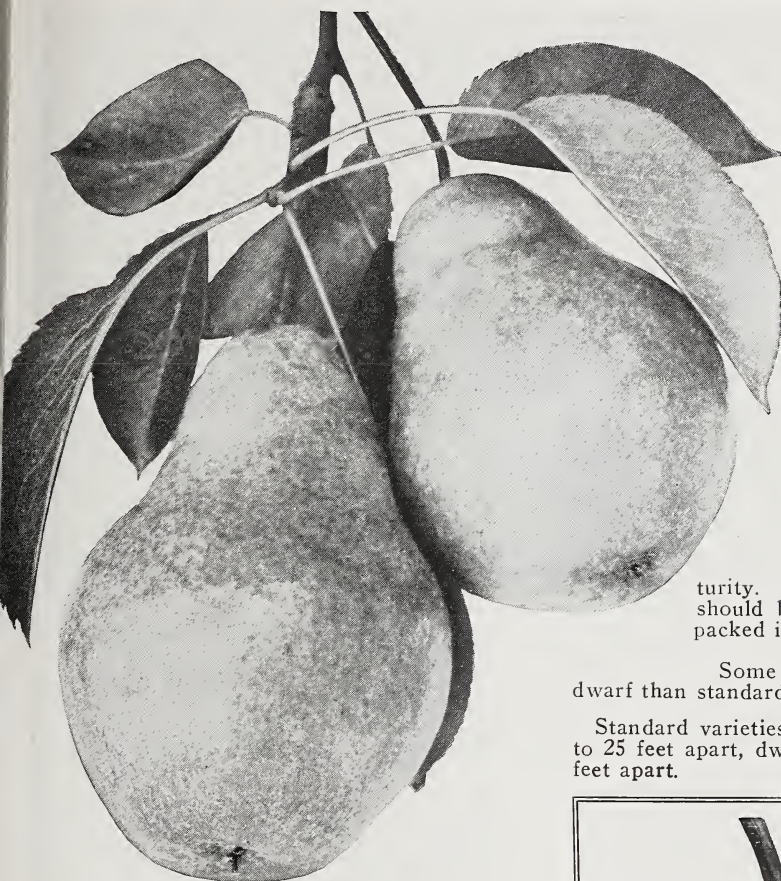
Thos. J. Riggs, Horticulturist of the Iowa Experiment Station, answers him as follows: "The Banana Apple is one of the best you can plant. In fact, it is, in my judgment, the most profitable Apple in your state. I think that an orchard of Winter Banana and Delicious would be a gold mine."

E. E. Whitney, of Hillsdale, Michigan, says in a letter dated October 2nd, 1918: "I am sending you two photographs of Banana Apple trees. The first tree bore fifteen bushels of first-class fruit in 1916 and I have just picked seventeen and one-half bushels of fruit from it this year. Jonathan tree, same age, only produced eight bushels. I planted this orchard for fruit for home use, but two crops have paid investment, care, labor, etc."

What We Think

The Greening Nursery Company grow all leading varieties of Apple trees, but there are none in our estimation which will give as complete satisfaction to our customers as the Winter Banana. You owe it to yourself to give it a trial.

The expense of growing an orchard of
SUPER-SELECTED TREES
is no greater, but the net returns are.



Bartlett Pears.

Summer Pears

BARTLETT.—Large size; yellow, often with a beautiful blush next the sun; buttery, very juicy and highly flavored. Tree a strong grower, bearing early and abundantly; very popular; the most profitable for market. Last of August and first of September.

BARTLETT (Inman's Improved).—Same in quality as regular Bartlett but much larger. Be sure to mention Inman's Improved if this variety is wanted.

CLAPP'S FAVORITE.—A large, fine Pear resembling the Bartlett, but without the musky flavor; pale lemon-yellow, with red cheek; fine texture, melting, buttery, juicy, with a rich, sweet, delicate, vinous flavor. Tree hardy and very productive; very desirable in all sections, and especially so where other varieties fail. August.

KOONCE.—Originated in Southern Illinois. A strong, upright grower, hardy; has produced crops when all other varieties were killed by frost. Fruit medium; yellow with carmine cheek; ripens with the earliest. July and August.

WILDER.—One of the best very early Pears. Attractive in size and shape. Flesh is very sweet and rich with a faint pleasant perfume. Fruit small but edible to the very center, core being very small. Tree is a strong grower, very productive and a handsome ornamental tree. Season first of August.

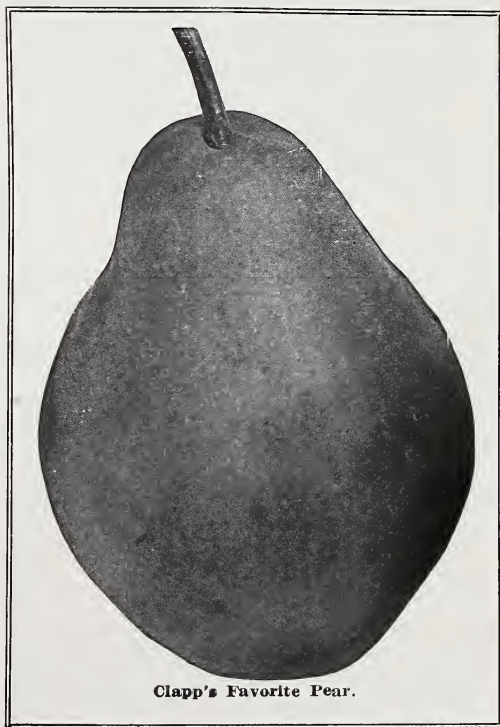
Pears Equal to Any for Length of Season and Quality of Fruit

The Pear is equal if not superior to most other fruits. Its varieties cover a longer season than any other, except the apple. It succeeds wherever the apple does, but does best in heavy clay and clay loams.

Unlike other fruits, Pears must be picked before they ripen enough to eat. Wait until they have attained full size and begin to show the colors of maturity. As soon as picked they should be wrapped in paper and packed in a box.

Some varieties succeed better as dwarf than standard. (See under Dwarf Pears).

Standard varieties should be planted from 18 to 25 feet apart, dwarf varieties from 10 to 15 feet apart.



Clapp's Favorite Pear.



A Branch of Kieffer Pears.

Autumn Pears

ANGOULEME (Duchess d'Angouleme).—Very large; greenish yellow, sometimes a little russeted; makes a beautiful tree; very productive. One of the best. October and November. Succeeds best as a dwarf.

ANJOU.—The standard market Pear for late Fall and early Winter. Fruit large, skin yellow, dotted with russet, has faint blush. Flesh is yellowish white, firm but tender. Very juicy, sweet and spicy with a rich vinous flavor. One of the very best. Season October to December.

FLEMISH BEAUTY.—A highly flavored Pear, large and beautiful, strong grower and good bearer and a popular market variety. Fruit subject to skin scab, which is easily controlled in the commercial orchard. Season September to October.

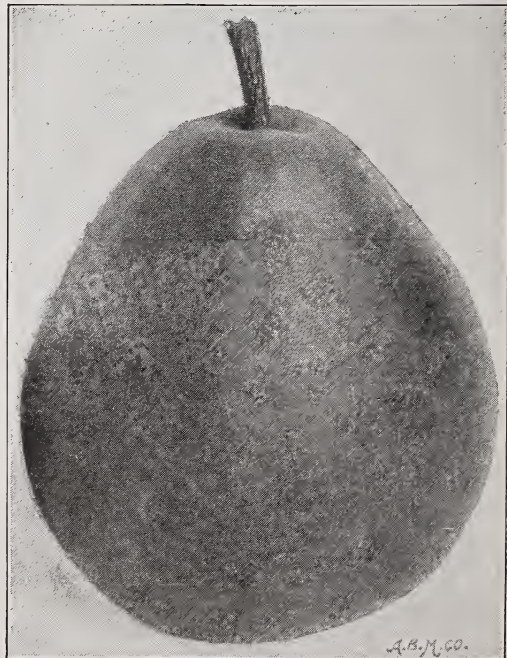
HOWELL.—Large, light waxy yellow with a fine red cheek, handsome flesh is of good quality. Tree is a free grower, an early producer. Very hardy and valuable, especially for the home orchard, as it is quite disease-resistant as compared with other Pears.

KIEFFER.—Large, skin rich golden yellow, sometimes tinted with red on one side. Flesh lightly colored, juicy, with a pronounced quince flavor. Tree very vigorous. An early and big yielder. While its flavor is poor at picking time, if kept in cellar until Christmas time, it is a wonderful eating Pear. Valuable because of its keeping qualities. Season November to January.

SECKEL.—In quality cannot be surpassed by any kind of fruit. Tree is very vigorous, productive and quite immune to blight. Fruit very highly colored, small but uniform in size, very symmetrical. Flesh very juicy, fine grained and very delicately flavored. Fruit reddish brown color. Season September to October.

SHELDON.—A splendid Pear for dessert and culinary purposes, especially recommended for the home orchard. Fruit large, roundish, yellow, slightly shaded with red. Flesh very juicy and very delicious. Tree hardy, vigorous and a good bearer. Very blight-resistant. Season October.

WORDEN (Worden Seckel).—Larger than the Seckel. Flesh all white, very juicy, excellent flavor. A better keeper than Seckel, recommended to take its place in the commercial orchard. Its quality is not quite as good as Seckel. Ripens in October.



Seckel Pear.



Winter Pears

BOSC.—Originated in Belgium. Shape oblate-pyriform, and of very large size. Color a beautiful yellow, touched with crimson and slightly russeted. In quality it is undisputed as the most delicious dessert Pear known. A medium late variety. The tree, however, is a poor grower, but under our method of double grafting we restore it to a strong, thrifty and productive tree. This Pear always sells at the highest prices, frequently bringing as high as \$4.00 to \$5.00 per bushel in the commercial markets.

CLAIRGEAU.—A very showy and well formed Pear; fruit large with stout stem. Color golden yellow with highly colored red cheek. Highly flavored. Productive and a reliable cropper. Fruit very firm. Early bearer. Season October to January.

LAWRENCE.—About medium; yellow, thickly dotted; very rich, fine flavor. One of the best. Tree a good grower and very productive. December to January.

Dwarf Pears

Dwarf Pears should be planted below the bud sufficiently deep (three or four inches) to cover the junction of the Pear and quince roots upon which Dwarf Pears are budded. Dwarfs frequently succeed where Standards fail, especially where the soil is deficient in clay loam. It is very important to select the proper varieties, however, as all varieties of Pears do not succeed well as Dwarfs. Those most desirable are: Angouleme, Bartlett, Clapp's Favorite and Seckel. Plant from 10 to 15 feet apart.



Bosc Pear.

Quinces

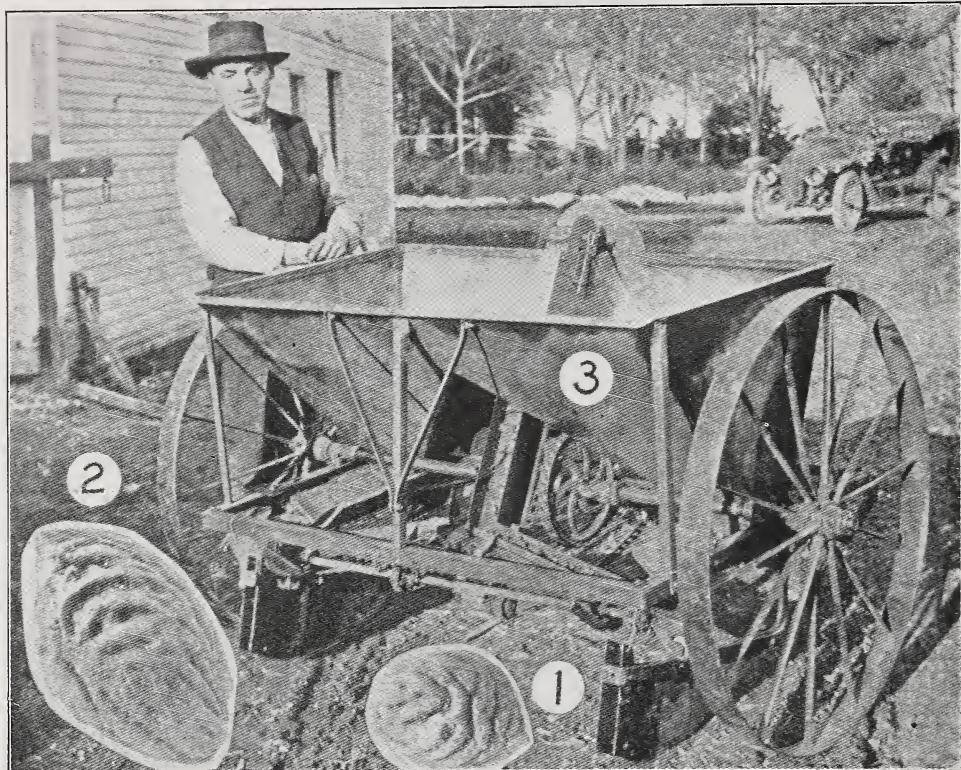
The Quince is of late attracting a great deal of attention as a market fruit. It is hardy and compact in growth and requires but little space. It is productive if handled properly and gives regular crops, coming into bearing in about two or three years and continues productive, if well managed, for forty years or more. The fruit is much sought after for canning, preserving and for jellies. It gives a delicious flavor to the apple, cooking in any manner. They should be planted ten or twelve feet apart on deep, rich soil.

CHAMPION.—A prolific and constant bearer; fruit averaging larger than the Orange, more oval in shape, quality equally fine; bears extremely young, producing fine fruit on two-year trees in nursery row; can be kept in good condition until January. Tree a vigorous grower and prolific bearer; one of the best for sections not subject to early frosts.

ORANGE.—Large, roundish; bright golden yellow; cooks tender, and is of very excellent flavor. Valuable for preserves or flavoring; very productive; the most popular and extensively cultivated of the old varieties. October. (See illustration).



Orange Quince.



In the cut above we illustrate our peach pit planter. The man who invented it, Mr. Romine, is shown. The capacity of this machine is 75 bushels a day. The small peach pit No. 1 is a Tennessee native peach pit. There are about 3,000 such pits in a bushel. The large pit No. 2 is from a domestic pit. We use nothing but No. 1 in our propagation, because it means a strong, healthy tree, free from disease.

Why We Grow Peach Trees By the Million

The demand for the class of trees we grow is national and this has been brought about by the excellent quality of the stock produced in our nurseries.

No doubt the chief reason for the quality of Peach trees produced by us is the selection of suitable soils which will grow a heavy and well branched root system.

Then too, we use only buds for propagating taken from "parent trees" that are known and proven to be exceptional producers of fruit, characteristic of the variety we wish to reproduce.

The same unusual care that is practiced throughout our nursery operations brings our trees to our customers in the best state of vigor, so that practically no loss of trees is experienced.

To produce a worth-while Peach tree the seed is the first consideration, and a natural

Peach pit is shown in the cut above. The natural Peach pit shown looks small. It is No. 1. It does not look as good as No. 2, but No. 2 is inferior—it being a canning factory pit.

These wild pits are secured in the mountains of western North Carolina and eastern Tennessee. They have no diseases inherent in them and on these healthy seedlings we bud the varieties that we desire grown therefrom. Possibly you do not know, but we have introduced more new Peaches of worth-while varieties than any other nursery in the United States. Commercial orchardists know this, and we wish to call your attention to five Peaches that have made a name for themselves in the commercial markets of this country, namely, the Banner, New Prolific, Kihlken Smock, September Mammoth and our wonderful South Haven. Each of these was introduced by us and all of them have proved to be desirable in the great Peach growing districts.



OUR NEW SOUTH HAVEN PEACH.

Here is a photograph of our New South Haven Peach taken the second year from planting. This tree was planted in 1918. The photograph was taken by Mr. Dutton of the Michigan Agricultural College in 1920. Note the size of the peach and the number on a two-year-old tree. Surely you will agree with us that this is remarkable. You do not have to take our word for it. We have given you Mr. Spencer's name and address. You can write him, or any official of the Michigan Agricultural College at Lansing, Michigan. So far we have never been able to propagate enough to meet the demand. The outstanding characteristics of this Peach are its proclivity for bearing—its extreme hardiness—its color and its shipping quality, as well as the season in which it ripens, which is two weeks earlier than the Elberta, thus lengthening the season and bringing the very highest market prices each year, as all commercial growers will know.



A close-up view of our South Haven Peach Block. This is an exceedingly hardy commercial variety. Note the thrifty growth and healthy appearance.

South Haven

The Peach of Distinctive Merit

The Most Profitable and Hardest Commercial Peach

This wonderful Peach originated in the orchard of Mr. A. G. Spencer near South Haven, Michigan. He set in 1908 two rows of St. John. These trees came from us. In 1911 when the trees were three years old he noticed one tree which had a full crop of Peaches, while the other trees in the two rows had few if any. Each year the same condition obtained until in the Summer of 1914 Mr. Spencer called the attention of Mr. Roy Gibson, chief of our Research Department, to this tree. Mr. Gibson examined the tree carefully and noticed a very apparent difference as to growth, it being more spreading in habit, the leaves larger and much more vigorous than the trees in the other two rows. Mr. Gibson visited the tree each year until 1916 when we decided to propagate it and on the 14th day of August, 1916, he cut 750 buds which he sent to us marked as a new variety.

The following year, 1917, the parent tree had its largest crop. Many interested in horticultural matters visited the orchard to see this tree, and later fruit from it was shown in the business places of South Haven, Michigan. Having decided that this new variety was worthy of a name and would soon become one of the leading commercial Peaches we decided to propagate a quantity and named it the **SOUTH HAVEN**.



Note the vigor of this variety. Our Mr. Roy E. Gibson is fully six feet in height. Always modest he excused his being in the photo, so that we could show size and growth by using him as a criterion by which to judge. This is tree No. 13. You will notice its number on trunk but barely discernable in cut. Record of this and all other check trees in our Pedigreed Record Book may be seen at our office if you are interested.

Some Facts About the South Haven

THE SOUTH HAVEN HARDY. Experience has shown that this variety is hardy. The original tree stood a severe test in the Winter of 1917-18, in that it was heavily loaded in 1917, having 6½ bushels and yet it stood the Winter, while large numbers of peach, pear, plum and apple trees were winter-killed in the vicinity of South Haven, Michigan.

Here follows the record of the original South Haven tree which was planted in 1908, and began bearing in 1911, at three years of age:

In 1911 produced	1 bushel
In 1912 produced	1 bushel
In 1913 produced	4 bushels
In 1914 produced	3 bushels
In 1915 produced	4 bushels
In 1916 produced	5 bushels
In 1917 produced	6½ bushels
In 1918 produced	1½ bushels
In 1919 produced	2½ bushels
In 1920 produced	4 bushels
In 1921 produced	3¾ bushels

Now mark you this! The year following the coldest Winter known in Michigan for fifty years (that of 1917-18) this tree bore one and one-half (1½) bushels of fruit, following the six and one-half (6½) bushels of fruit in 1917, when nearly all other varieties of Peaches in the section about South Haven were either killed or did not bear.

THE SOUTH HAVEN PROLIFIC. The original tree in 1922 was injured by the severe windstorm but its very remarkable record indicates its bearing qualities. It is not comparable with other varieties as it occupies a niche entirely of its own, possessing every leading characteristic demanded by commercial growers. We realize that this is a strong statement but the SOUTH HAVEN has now stood the acid test and ten years have elapsed since the original tree began fruiting.

THE SOUTH HAVEN, ITS SEASON. A Peach of market value ripening in August has long been needed. The South Haven ripens approximately eighteen days

before Elberta in the latitude of South Haven, Mich. This indicates its season and coming at this time it brings the very highest market price.

THE SOUTH HAVEN AS A CANNER. Before propagating it in quantity we had it tested by the leading canning factories of Michigan and in their opinion it outranked any Peach now in cultivation as a canner. In size it ranks with the Elberta, has good color, thick skin, is a good shipper, and is now recognized as a commercial variety of exceptional excellence, which can be verified by referring to page 42 of Special Bulletin 126 issued by the Michigan Experiment Station at East Lansing, Michigan.

THE SOUTH HAVEN AS A POLLINATOR. In tests made by Prof. Gardner of the Michigan State College in the Summers of 1923-24, it was discovered that the South Haven was a perfect pollinator for the Hale. These studies and experiments of Prof. Gardner are valuable in that as the Hale is very popular because of its size, beauty, quality and ability to stand shipment, and because it was found to be self-sterile it was a disappointment as a producer.

PROF. GARDNER'S TESTS. Prof. Gardner made some tests including pruning and cross-pollination. The work on cross-pollination is what proved to be the solution of the problem. It was shown very convincingly where these experiments were held in the orchard on the J. J. Barden farm, near South Haven, that the Hale was self-sterile. In some cases clusters of over 150 buds were "sacked" so they would have to fertilize themselves and not in one instance did fruit develop. But where the blossoms were pollinized by pollen from the South Haven, Elberta and Kalamazoo, the results were satisfactory. The pollen from these varieties gave better results than that from other varieties.

The Kalamazoo is not as good a market Peach as the Elberta, therefore, this experiment seems to indicate that the ideal combination for the commercial Peach grower are alternate rows of South Haven, Elberta and Hale Peaches. These three varieties are unexcelled for market purposes, and with South Havens and Elbertas set close to the Hale good fertilization of that variety is assured.



“Boiled Down” Reasons

Why the Peach is a Desirable Fruit to Plant

FIRST.—Quickest of all orchard trees to bear profitable crops in three to four years.

SECOND.—More trees can be planted to the acre than permanent varieties of apples.

THIRD.—Can be used as fillers in apple orchards until the apples come into bearing.

FOURTH.—Tremendous scarcity of bearing trees at the present time.

FIFTH.—Very few Peach trees have been planted during the past five years.

SIXTH.—Millions of Peach trees are dying out annually, but very few young trees have been planted to fill the gap.

SEVENTH.—The fruit of the Peach is more popular than any other during its season.

EIGHTH.—Sugar is both plentiful and cheap, and the canning of Peaches—the best of all fruits for that purpose—will come back to normal, resulting in a big demand, whereas the supply is decreasing for reasons set forth above.

NINTH.—These facts mean increased demand and more profit to the grower.

TENTH.—The yield per acre often exceeds 300 bushels in favorable seasons. The price of the fruit has increased over 200 per cent in recent years.

Refer to lists below for varieties in their order of ripening.

If you desire our advice as to varieties for your section write us. Glad to pass on any information we have at hand resulting from our seventy-five years of experience.

List of Peaches In Their Order of Ripening

For the convenience of our patrons and salesmen we give herewith a list of Peaches in their order of ripening. This will be of material assistance in selecting varieties for commercial orchards.

We have used the Elberta as the standard, because it is well known and is grown more largely than any other in all commercial Peach sections.

Mayflower Last week of June.

Alexander } About eight weeks before
Greensboro } Elberta.

Carman } About four weeks before
Mountain Rose } Elberta.

Dewey } Ten days before St. John.
Triumph }

St. John }
Rochester } Three weeks before Elberta.
Champion }

South Haven } Eighteen days before El-
(Trade-Mark) } berta or a few days after
St. John.

Early Crawford } Two weeks before Elberta.
Fitzgerald } Between St. John and New
Prolific.

Weed's Barnard Ten days before Elberta.

Engel's Mammoth }
Gibson } One week before Elberta.
New Prolific }
Nagara }

J. H. Hale } About five days before El-
berta.

ELBERTA } Ripens Sept. 10th to 20th,
depending, of course, on the
season and location. Crop
usually picked in one week.

Belle of Georgia } Same as Elberta.
Salberta }

Kalamazoo } With Elberta or a few days
later.

Late Crawford With the last of Elberta

Gold Drop } One week after Elberta.
Gold Mine }

September Mammoth Ten days after Elberta.

Banner } Ten days after Elberta. First
picking with last of Gold
Drop.

Lemon Free With last of Banner.

Kihlken Smock }
Old Mixon Free } Two weeks after Elberta.
Chair's Choice }
Matthew's Beauty }

Salway } Three weeks after Elberta.
Stump } First picking right after last
of Kihlken Smock.
Heath Cling }



Peaches

Next to the apple, the Peach has the widest variety of uses and if the apple can be justly called the "King of Fruits" the Peach is "Queen." The Peach has been told of in song and story since the beginning of time and enjoyed by all mankind the world over. Popular opinion has it that the Peach is a short-lived, tender tree, but as a matter of fact it is now grown successfully in every state of the Union.

The variety to choose always depends on the section of the country in which they are to be grown and for what purpose. Some of the most delicious are fit only for home use and are not good as a commercial product.

It is quick to reach the bearing age, and with the right selection of varieties and the care given that it should have, the fruit may be enjoyed by all for three or four months every Summer and Fall.

Perhaps it might be well to state here, that we are the largest growers of Peach trees in the country, having an unusual combination in soil and climate on the western shore of Lake Erie. A visit to our nursery and the sight of the stock we have growing will convince anyone as to the truth of the statement.

Description of Varieties

ALEXANDER.—A very early ripening clingstone Peach of medium size. Flesh greenish white, juicy, sweet and very mild. Quality fair to good. July.

BANNER.—Introduced by us in 1899 and still remains the greatest Peach in its season. Originated at Woodlee, Ontario, Canada. Fruit large, round and very handsome. Tree very hardy and an early and abundant bearer. No other late Peach compares with it in quality. In both bearing and quality it equals New Prolific. Unsurpassed in richness of flavor. A strong, vigorous grower. Winner of ten first premiums at Canadian Agricultural Fairs. Color deep yellow with a rich crimson bloom. Flesh golden yellow from pit to skin. Pit small and perfectly free. Its shipping qualities are unsurpassed. Season of ripening ten days after Elberta. This Peach is very hardy and dependable, but should be fertilized, pruned and thinned. Big money-maker when other varieties do not bear. An excellent commercial variety.

CARMAN.—Large, resembles Elberta in shape. Color creamy white with deep blush. Skin very tough, flesh tender, fine flavor and quite juicy. One of the hardest in bud, quality very good. Ripens just before Champion. Stone nearly free.

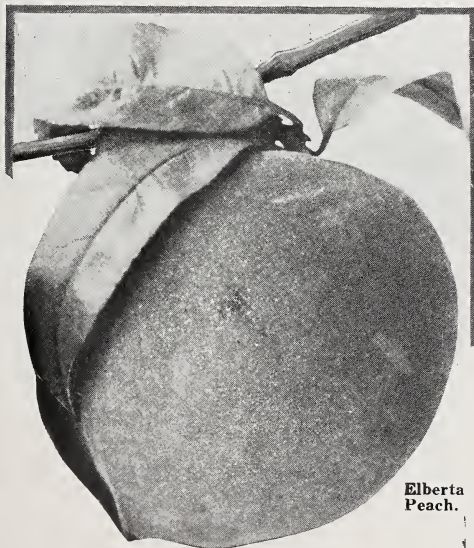
CHAIR'S CHOICE.—A yellow-fleshed Peach and one of the best of the famous Crawford group. Color sub-acid or sprightly and pleasantly flavored. Quality sub-acid or sprightly and pleasantly flavored. Quality excellent. Freestone. Ripens late midseason.

CHAMPION.—A white-fleshed Peach, very excellent in quality; very attractive fruit; large. Flesh creamy white, tender, very pleasant flavor, having a peculiar honeyed flavor. Stone semi-free to free. Ripens with St. John; three weeks before Elberta.

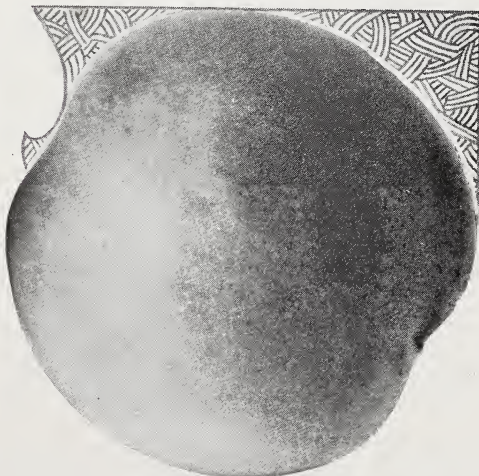
DEWEY.—An early yellow-fleshed, commercial variety; perhaps best for the purpose of any of the very early varieties. Fruit medium size, round oblate in shape. Color deep orange-yellow blushed with dark red—(very pubescent). Flesh yellow, juicy, tender, melting, sweet, but sprightly and good in quality. Stone semi-free to free. Valuable for early market.

EARLY CRAWFORD.—A wonderful Peach for the home orchard because of its high quality and very beautiful appearance. A yellow freestone Peach, very large, golden yellow blushed with dark red. Excellent in quality. Ripens two weeks ahead of Elberta.

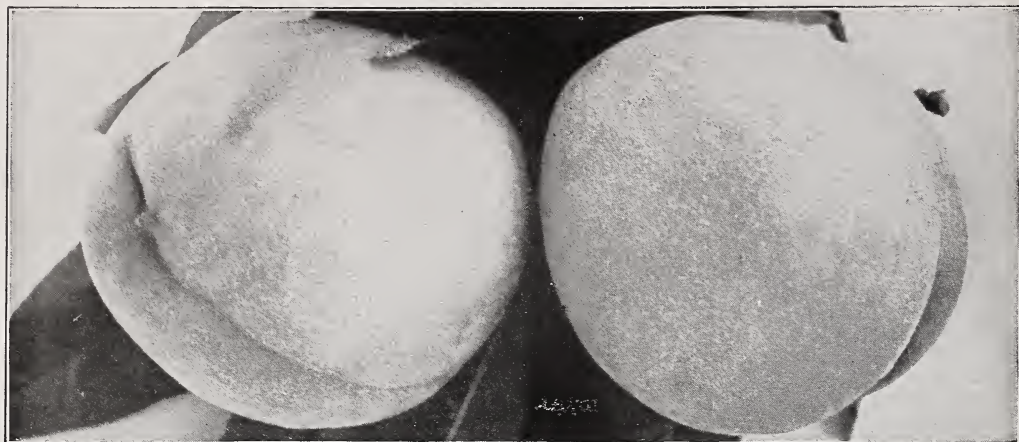
ELBERTA.—By far the most extensively planted variety. Planted with profit in every Peach-growing district in the United States. Popular as a commercial variety because of its fruitfulness, its size and remarkable shipping qualities. Its principal fault is that it is not as hardy in either wood or blossom as many of the other varieties of Peaches. Therefore, we strongly recommend that other commercial varieties of a hardier nature be planted in the same orchard with Elbertas to more or less insure some financial returns during the off years of Elberta. To plant a solid orchard of Elbertas is not conservative business practice. We hesitate about recommending Elbertas for the home orchard, as we have other varieties far superior in flavor. Fruit very large, color orange-yellow, overspread with red. Flesh yellow, stained with red near the pit, juicy, firm but tender, sweet or sub-acid, mild, quality fair—most of our varieties are superior to Elberta in this respect. Stone free. Period of ripening varies with season. September 10th to 20th. Crop usually picked in one week.



Elberta
Peach.



Banner Peach.



Kalamazoo Peaches.

ENGEL'S (Engel's Mammoth).—Of the Crawford type but productive, and comes into bearing younger. An excellent commercial variety for Michigan where it originated. Fruit large, round, oval to condete. Color greenish yellow, changing to orange-yellow, in part overspread with a bright red blush, splashed with darker red. Very attractive. Flesh pale yellow, juicy, tender and melting, sweet or pleasantly sub-acid, mild. Excellent in quality. Stone free. Ripens one week earlier than Elberta.

FITZGERALD.—An improvement over the Early Crawford in that it is hardier and more productive. In size, color and quality the fruit is almost identical. Fruit medium, roundish oval to condete, somewhat compressed, with unequal halves, bulged at one side. Color golden yellow, more or less overspread with dull red blush with splashes and mottling of deeper red. Flesh yellow, juicy, rather firm, tender, sweet or mildly sub-acid, very pleasantly flavored. Quality excellent. Stone free. If a fruit grower wishes to grow a Crawford type of Peach in his orchard, we recommend this variety for the commercial orchard. Ripens with Early Crawford, two weeks before Elberta.

GIBSON.—Large, round, highly colored. Ripens about September, in Michigan. Flesh yellow. Best of all clingstones. Originated on farm of C. M. Barden, South Haven, Michigan. New.

GOLD DROP.—Remarkably productive and hardy. The tree bears so heavily that the fruit will average small unless the tree be heavily pruned, thinned of the young fruit and fertilized. The thinning and pruning tends to throw more vitality into the remaining fruit and the fertilization also adds vigor. Many of our leading commercial varieties have a tendency to overbear, which is not a serious fault but really more of an asset. The transparent golden skin and flesh of this Peach make it one of the handsomest of all Peaches. Its distinctive vinous, rich, refreshing flavor makes it a very desirable fruit. Fruit medium size, roundish oval bulged at one side with unequal halves. Cavity deep and abrupt. Color a transparent golden yellow. Flesh pale yellow to the pit, pleasantly and sprightly flavored, excellent in quality. Stone free. Gold Drop should be in every commercial as well as home orchard. Ripens one week after Elberta.

GOLD MINE.—A cross between Barnard and Late Crawford, resembling the latter parent. Fruit large; color greenish yellow, blushed with dull red. Flesh yellow, juicy, sprightly, pleasing; quality excellent. Stone free. A fine variety for the home orchard. Ripens one week after Elberta.

GREENSBORO.—One of the leading early, white-fleshed Peaches. It takes high place because of its showy fruits and its large, vigorous, early-bearing, prolific trees. Adapted to a great variety of soils. Good shipper. Color creamy white, blushed with red, flesh white,

very juicy, tender and melting, mild, sweet, sprightly; fair quality. Semi-cling.

J. H. HALE.—Originated in the famous Hale Orchards. Widely planted. About the size of Elberta or larger. Color yellow, with deep carmine blush. Good shipper. A handsome Peach. Fine variety for market. Ripens about five days earlier than the Elberta. Not enough can be said about this wonderful Peach as regards its size, beautiful color and shape. An excellent shipper. Inasmuch as J. H. Hale is self-sterile in the blossom, pollenizing varieties such as South Haven or Elberta should be planted near it.

HEATH CLING.—The oldest named American Peach. Valuable for its hardiness, freedom from disease and excellence for preserving or pickling. Color creamy white blushed with red. Ripens very late, about three weeks after Elberta.

KALAMAZOO.—Medium size; slightly oblong. Color yellow shaded with red. Flesh juicy, rich, melting. Highly esteemed in Michigan. This Peach is similar to Gold Drop in its tendency to overbear. Refer to description of Gold Drop for cultural directions to follow for Kalamazoo. Ripens with Elberta or a few days later.



J. H. Hale Peach.



KIHLKEN SMOCK.—We have discontinued propagating all other Smock varieties because the Kihlken Smock is so vastly superior. Larger, better and more beautiful than Beer's Smock and especially a more abundant bearer of fruit. Originated in the orchard of George Kihlken, at Danbury, Ohio, and introduced by us. Thousands of this tree have been sold upon our recommendation, and every commercial grower has repeated the planting of this variety after he saw the trees in bearing. Ripens two weeks after Elberta. An excellent season for the market. Stone free.

LATE CRAWFORD.—Fruit of large size. Color yellow or greenish yellow with dull red cheek. Flesh yellow. Tree vigorous and productive. One of the best late sorts. Stone free. Ripens with last of Elbertas.

LEADER.—A Burbank introduction. One of the best and most productive sorts. Is very early, ripening with Hale's Early. Good for canning, shipping or market. Firm sweet, delicious and very heavy and regular bearer. Freestone. Yellow.

LEMON FREE.—Almost lemon shape, pointed at apex. Color a pale lemon-yellow when ripe. It is of large size, excellent quality and a valuable market sort. Flesh yellow, juicy, stringy, tender and melting, sweet to sprightly, pleasantly flavored, very good in quality. Stone semi-free to free. An excellent variety for the commercial orchard, especially for those situated near a canning factory, as it has the reputation of making a handsomer canned product than any other Peach. It is a good Peach for any commercial orchard. Season of ripening ten days to two weeks after Elberta.

MARQUETTE.—New. As hardy as an apple tree. We are just beginning to introduce this variety. The original tree may be found at Marquette in the upper Peninsula of Michigan where it has withstood a temperature of twenty degrees below zero without the least injury. We are positive that this variety can be grown successfully in cold climates where Peaches have never been successfully grown before, such as in Minnesota, upper Wisconsin, Iowa and Northern Michigan. Fruit medium in size and round. Flesh creamy white, very juicy and palatable. Good quality. Pit is small and free. Ripens two weeks earlier than Elberta.

MAYFLOWER.—Earliest ripening Peach. Last week in June or first week in July. Tree productive. Fruit medium in size. Color dark red. Flesh white, juicy and tender. Quality fair.



**NEW
PROLIFIC
PEACH**

NEW PROLIFIC.—Introduced by us in 1890. One of the most popular market varieties. Fruit large. Color golden yellow with rich crimson cheek. Flesh golden yellow from pit to skin. Firm and unusually thick; flavor very rich and spicy. Pit small and free. This variety withstood the cold Winter of 1898 better than any other variety. Tree a strong grower and very productive. Ripens one week before Elberta. Hundreds of thousands of this variety have been planted. The New Prolific should be fertilized, pruned and thinned for best results.

NIAGARA.—An improvement over the Early Crawford, ripening about one week ahead of Elberta. Fruit very large; color orange-yellow blushed with deep, dull red, with stripes and splashes of darker red. Flesh yellow, deeply tinged with red near the pit, juicy, coarse, out tender, sprightly, very good in quality. Stone free. A fine variety for the home as well as the commercial orchard.

OHIO IMPROVED LATE CRAWFORD.—The Peach we offer you under this name is an improved selection budded from a Late Crawford that is very productive. All fruit growers know that the Late Crawford is not usually a very heavy producer. This strain is a good producer. Growers who want an Improved Late Crawford will find this one to be so. In all other respects it is like the Late Crawford, but it is very productive. It ripens the last of September.

ROCHESTER.—A new yellow freestone Peach having the exceptional merits of being early, ripening about August 10th; extraordinary sweetness and early bearing. In other respects it compares favorably with the best standard varieties. Fruit large; color yellow, prettily blushed. Flesh sweet, juicy and of delicious flavor. Keeps and ships well. Tree a vigorous grower, hardy and an annual and prolific bearer. Season three weeks before Elberta.

ST. JOHN.—A grand Peach. Fruit large, round, brilliant, showy. Color yellow, with fine red cheek. Flavor unexcelled by any other Peach. One of the earliest yellow Peaches. Bears young. Moderately productive. Ripens three weeks before Elberta.

SALBERTA.—A new yellow Peach originating on the farm of William Rofkar on Catawba Island, Ohio. The growers in the Peach Belt of Northern Ohio think this is a very valuable variety. Size medium to large, nearly round. Color deep yellow with dull red cheek. Flesh yellow, firm and very juicy. Season September, in Northern Ohio.

SALWAY.—Fruit large and roundish. Color deep yellow with a dull red cheek. Flesh yellow, firm, juicy and rich. One of the very best late Peaches, where it will ripen. Ripens after Kihlken Smock, about three weeks after Elberta.



Rochester Peach.

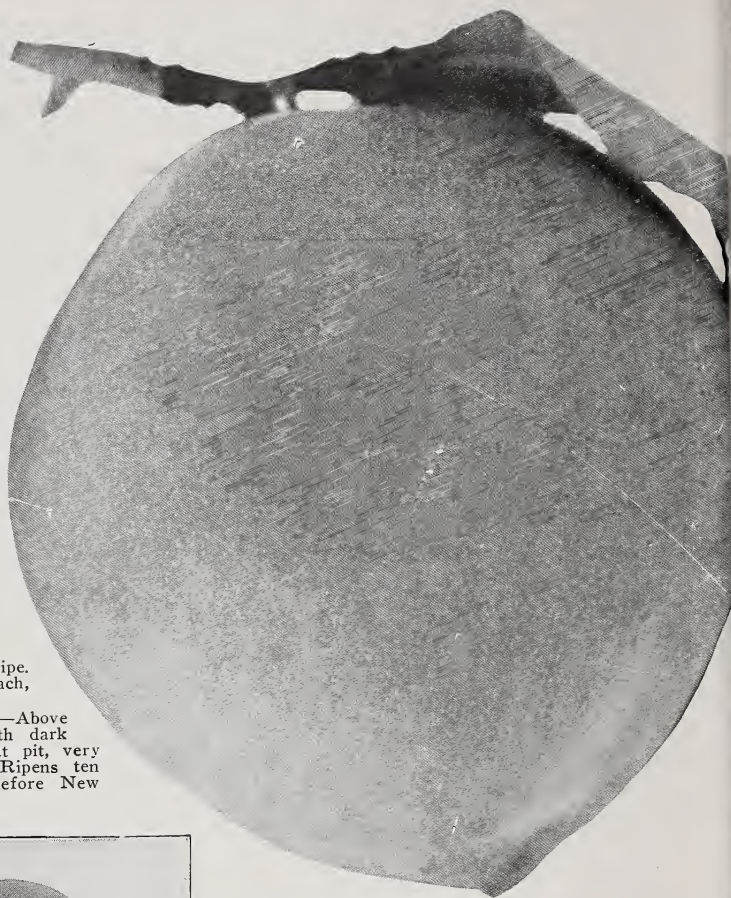
SEPTEMBER MAMMOTH.—

Fruit extra large, somewhat elongated. Color yellow, delicious in flavor. Stone free. Good bearer. One of the finest Peaches to plant for home purposes. Ripens about September 10th, tree originated here in Monroe from a seedling. Of northern origin, therefore harder than the Elberta. This Peach was introduced by us after careful observation of its habits and we recommend it highly. Season ten days after Elberta.

SOUTH HAVEN.—Tree vigorous, of semi-spreading type. Very hardy. The original tree having withstood the severe Winter of 1917-18. At this time, all Elbertas were completely killed by the low temperature. Fruit large, roundish, thick skinned, very uniform in size. Color deep yellow with red cheek. Stone free. Prolific bearer. Ripens more than two weeks earlier than Elberta or just a few days later than St. John. Introduced by us in 1916. Read pages 40 and 41 for full history of this Peach.

TRIUMPH.—Tree a strong grower and very hardy. Fruit large. Color yellow with red cheek. Flesh bright yellow. Great bearer and a good shipper. Stone nearly free when fully ripe. A very valuable early yellow Peach, ripening with Alexander in July.

WEED'S LATE BARNARD.—Above medium size. Color yellow with dark red cheek. Flesh yellow, red at pit, very rich. Small pit, tree hardy. Ripens ten days before Elberta or just before New Prolific.



Alexander Apricots.

Apricots

It is regrettable that a fruit as delicious as the Apricot, which ripens from one to two months before the best early peach, is so little known. A northern or exposed situation is preferable for the Apricot as its chief fault is that it blossoms so early as to be caught by a frost.

By careful management the Apricot may be expected to be as productive as the peach and is well worth cultivation. The varieties given are best to very best.

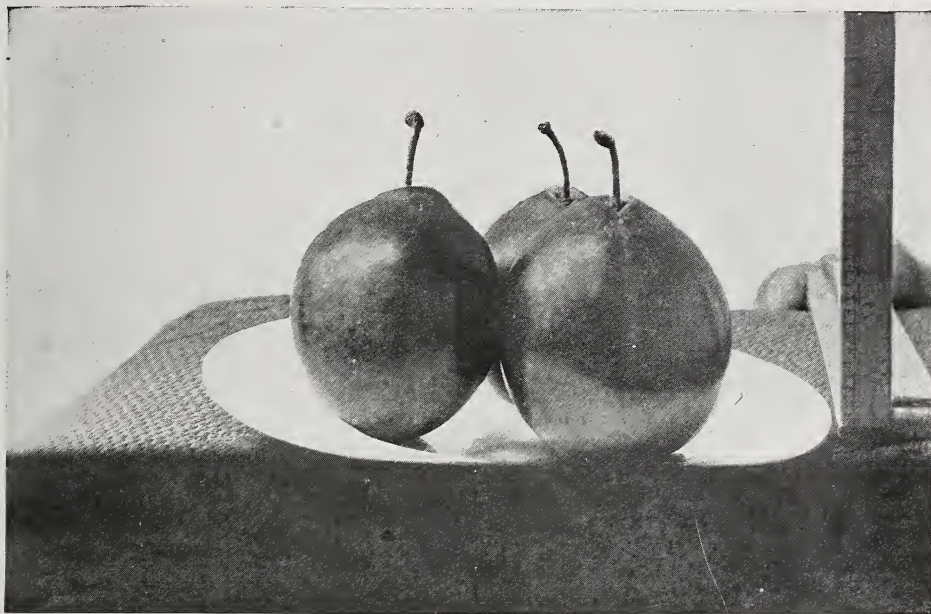
ALEXANDER.—An immense bearer. Fruit orange-yellow, oblong, flecked with red; sweet, juicy, very beautiful. July.

EARLY GOLDEN.—Small, surface wholly pale orange; flesh orange, moderately juicy, sweet, good. Ripens about August 5th. Hardy, very productive, profitable for market.

MONTGAMET.—Small. Fruit deep yellow; flesh reddish, firm with rather brisk flavor. Early. One of the best for preserving.

PEACH.—Very large. Yellowish orange with a brownish orange cheek and mottled with dark brown to the sun. Flesh rich yellow, juicy with a rich, high flavor. Ripens about August 15th.

ROYAL.—Large. Pale orange with faintly tinged red cheek. Flesh yellow, firm, sweet, highly flavored, slightly sub-acid and good quality. Ripens about August 10th. A good market variety.



Mammoth Austrian Prunes Taken From Two-Year Trees.

(Reduced to One-half Size)

Largest and finest flavored Plum ever introduced. The original tree in America is located at Ann Arbor, Michigan, on the farm of Mr. George Aprill, who imported the scions from Austria. Our buds were taken from this very tree. See complete description in list of varieties.

Plums, the Universal Fruit

The Plum is more nearly a universal fruit than any other with the exception of the grape. Great progress has been made within the past twenty years toward improving and developing of Plums. It is well known that some varieties are so deficient in pollen that they do not fertilize themselves and it is advisable—in fact a necessity—that all Plum orchards should be planted of two or more varieties alternating the rows.

The Austrian Prune Plum

The first Plum on the list is the AUSTRIAN PRUNE, our own introduction. The Austrian Prune in color is more black than red when fully ripe, and was introduced by us in 1905. It has won first prizes at Horticultural Exhibits and is one of the largest of all Plums and most delicious for dessert purposes.

American and European Plums

AUSTRIAN PRUNE.—Tree very vigorous, upright, perfectly hardy and is a young bearer and very productive. Fruit of this Plum is the handsomest and largest in cultivation. Color attractive dark reddish purple. Flesh golden yellow, sweet and mild; excellent quality. Good shipper and keeper. Ripens about middle of September. Takes highest honors and premiums everywhere. (E).

BRADSHAW.—Fruit very large, dark violet red; flesh yellowish green, juicy and pleasant. Tree vigorous, erect and productive. Ripens about middle of August. (E).

DESOTO.—Considered the best of American Plums by fruit growers. Quality good, very productive, shipping as well as any Plum. Color dark crimson over orange-yellow. Flesh golden yellow, very juicy, tender, melting, mild. Stone nearly free. (A).

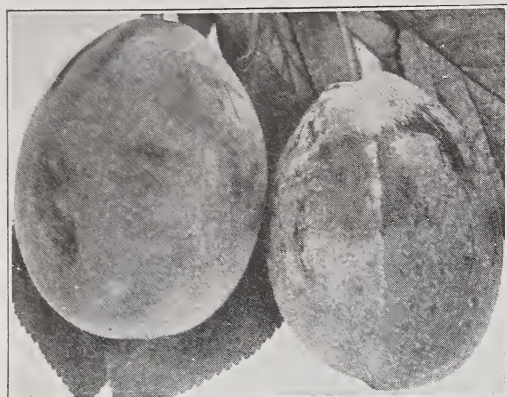
DIAMOND.—A superb and showy Plum of enormous size; dark purple with thick bloom. Vigorous, hardy, productive. September. (E).

GERMAN PRUNE.—A large, long, oval variety, much esteemed for drying; color dark purple; of a very agreeable and rich flavor. Productive, hardy. September. (E).

GRAND DUKE.—The favored late shipping Plum because of its very large size and beautiful color, being of a purple shade. Flesh very firm and meaty. A regular annual and abundant cropper. Usually free from rot and hang in good condition a long time.

GREEN GAGE.—Rather small, round, suture faint; surface green, becoming yellowish green, usually with reddish brown dots and net-work at base. Flesh pale green, melting, juicy, sweet and rich, and unequalled in flavor. Slow grower. Middle of August. (E).

GUEIL.—Tree a hardy, very strong, vigorous and upright grower, spreading with age and bearing; an early and very abundant bearer. Fruit medium, roundish oval; skin dark purple, covered with a thick blue bloom; flesh pale yellow, a little coarse, firm, juicy, sweet, sprightly, sub-acid, freestone. Last of August and first of September. (E).



Grand Duke Plum. (See page 47).

ITALIAN PRUNE (Fellenberg).—A fine late Plum; oval, purple; flesh juicy and delicious, parts from the stone; fine for drying. September. (E).

LOMBARD.—Medium; round-oval; violet-red; juicy, pleasant, and good; adheres to the stone. Tree vigorous and productive. Last of August. A valuable market variety; one of the most hardy and popular. (E).

MONARCH.—One of the most valuable of the late introductions from England. Tree robust, with dense foliage; an abundant bearer. Fruit very large, roundish oval; dark purple-blue; perfect freestone. October. (E).

PRINCE (Prince's Yellow Gage).—Rather large; golden yellow; flesh rich, sugary and melting; very hardy and productive; a favorite sort. August. (E).

REINE CLAUDE.—The best quality of the Gage variety of Plums, surpassing in quality and richness in flavor nearly all varieties listed. Fruit large, greenish yellow. Flavor excellent. Season September.

SHIPPER'S PRIDE.—Fruit large; dark purple; nearly round; flesh firm and excellent; a good shipper. Tree hardy and productive. Excellent for canning. September. (E).

SHROPSHIRE (Shropshire Damson).—Fruit small, oval; skin purple, covered with blue bloom; flesh melting and juicy, rather tart; separates partly from the stone. September. (E). **Our Super-Selected strain is much superior to the ordinary Shropshire Damson.**

YELLOW EGG.—Fruit of largest size; skin yellow, with numerous white dots; flesh yellow, rather coarse; sub-acid; fine for cooking. Tree vigorous and productive. Last of August. (E).

YORK STATE PRUNE.—Large, oval, dark blue, light bloom, firm, juicy; free. Vigorous; productive; a good market Plum. (A).

Japanese Plums

ABUNDANCE.—One of the best known and most popular of the Japan sorts. From our experience we can recommend this variety for more extensive planting. Medium to large, oblong, amber, nearly covered with bright red and overspread with a thick bloom; flesh orange-yellow, juicy, melting and of delicious sweetness; stone small and flesh readily parts from it. Tree a strong grower and an early and profuse bearer. Valuable for canning and market. August.

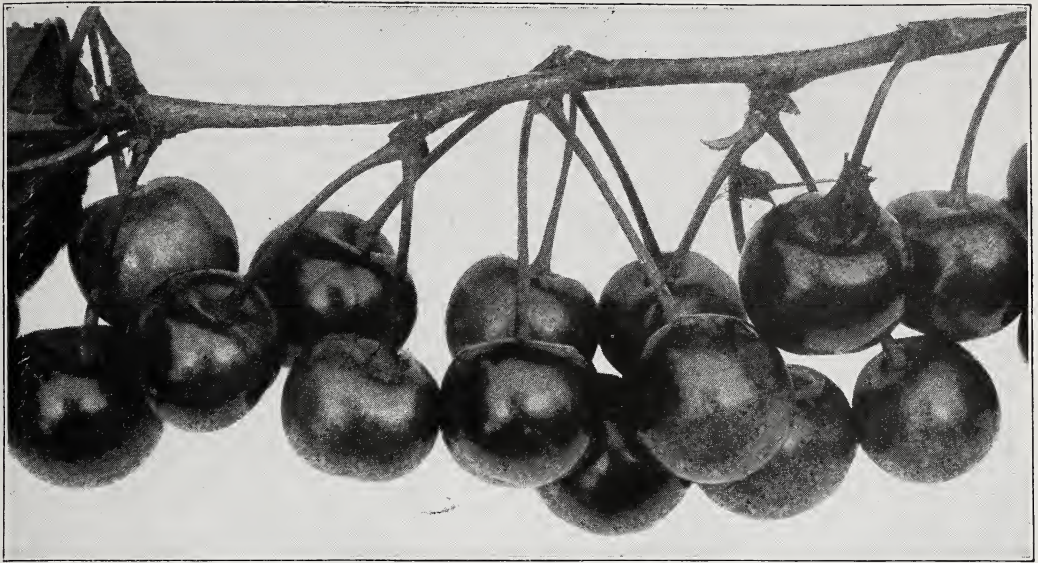
BURBANK.—The Burbank Plum is one of the best of the celebrated Japanese varieties. It is proving remarkably successful the country over. No other Plum ever became so popular in so short a time. It has been fruited many years in this country and is perfectly hardy. It seems to succeed in any soil, sand, clay or loam. It can be picked just before ripe and will ripen and color up perfectly, and will not lose its flavor. Will keep fully three weeks in perfect condition after ripening. We have kept them in a cupboard in our office for thirty days during very warm weather. Abundant yearly bearer; fruit large, roundish, dark red or purplish with thin lilac bloom; flesh amber yellow, melting with rich, sugary flavor; stone small; bears second year after planting; need close pruning. First to middle of August to September.

SATSUMA (Blood).—Very prolific in a mixed orchard. Fruit large, round-oblong; skin dark red speckled with greenish dots; flesh very firm, blood red, cling, rather coarse, good. Excellent for canning but not good for eating out of hand. Hardy and a vigorous, spreading grower. Season late and a very long keeper.

WICKSON.—Originated by Luther Burbank of California, who says: "This variety stands pre-eminent among the many thousands of Japanese varieties I have fruited." Tree hardy and an upright, strong grower, with narrow leaves; very productive. Fruit largest of the Japans; handsome, deep maroon-red; firm; a long keeper and a fine shipper; flesh dull yellow, meaty, of good quality; destined to become one of the most valuable Plums for market; keeps fully three weeks after picking. Fruit ripens after Burbank. Tree somewhat tender in cold northern countries. Middle of September.



Burbank Plums.



Large Montmorency Cherries.

Cherries

The Cherry, like the grape, succeeds where many other fruits fail. It doesn't ask for favorite spots and bears almost annually. Among the hundreds of varieties cultivated in America, those given herein are the most desirable in many respects.

Sour Cherries

DYEHOUSE.—A very early and sure bearer; ripens a week before Richmond and quite as productive and hardy. Color red. June.

LARGE MONTMORENCY.—A large, red, acid cherry; larger than Richmond, and fully ten days later; best market variety among sour Cherries. End of June.

Our Super-Selected strain is much superior to the ordinary Montmorency.

LATE DUKE.—Large, light red; late and fine. Last of July.

MAY DUKE.—Large, red; juicy and rich; an old, excellent variety; vigorous and productive. Middle of June.

MORELLO (English Morello).—Medium to large, blackish red; rich, acid, juicy and good; very productive. Tree a moderate grower. August.

OSTHEIM.—A hardy Cherry from Russia. Fruit large, roundish, ovate; skin red, dark at maturity; stalk long; flesh liver colored, tender, juicy, almost sweet. Its ripening season extends over about two weeks. Trees usually begin to bear the second year. Last of June.

RICHMOND.—Medium size; dark red, melting, juicy, sprightly acid flavor. This is one of the most valuable and popular of the acid Cherries, and is unsurpassed for cooking purposes. Tree a good grower, with roundish, spreading head, and is extremely productive. The most hardy of all varieties, uninjured by the coldest Winters. Ripens through June.

Sweet Cherries

BING.—One of the best black Cherries in existence. It is large, firm and delicious and a good shipper. Tree hardy and upright grower. Middle of June.

GOV. WOOD.—Very large; rich; light yellow with red cheek; juicy and sweet. One of the best. Last of June.

LAMBERT.—A very promising Cherry of largest size. Flesh red, firm and of unsurpassed quality. Stands in the lead as a shipping variety. June.

NAPOLEON.—Very large; pale yellow, with bright red cheek; very firm; juicy and sweet; vigorous grower and very productive; one of the best. First of July.

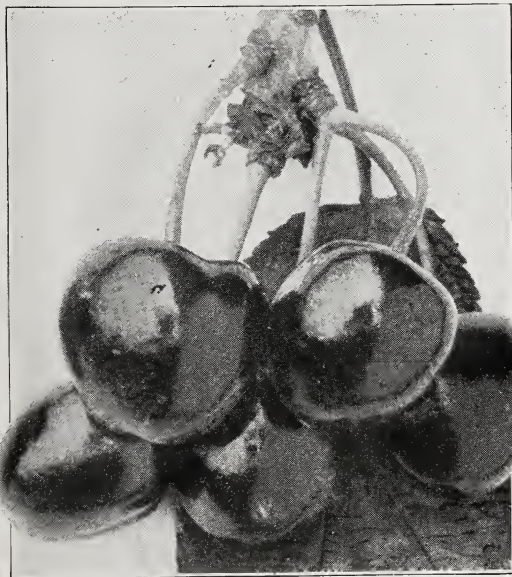
NELSON.—Tree a strong, upright grower and quite hardy for a sweet Cherry. Fruit large and slightly conical, quite firm and fairly sweet. It ripens mid-season to late and is an excellent shipping sort. The trees seem to be unusually productive for the class and it is a promising variety.

SCHMIDT'S BIGARREAU.—Remarkably hardy and productive. Fruit grows in clusters, and is of the largest size. Skin deep black; flesh dark, tender, juicy, with a fine, rich flavor. Stone small. July.

TARTARIAN (Black Tartarian).—Very large; bright purplish black; juicy, very rich, excellent flavor. Tree a vigorous grower and productive. Last of June or early July.

WINDSOR.—New seedling originated at Windsor, Canada. Fruit large, liver colored, quite distinct; flesh remarkably firm and of fine quality. Tree hardy and very prolific. The most valuable late variety for market or family use. July.

YELLOW SPANISH.—Fruit very large, heart-shaped. Color pale, waxy yellow with handsome light red cheek to sun. Flesh firm with fine rich flavor. Season medium. One of the best and most popular.



Bing Cherries.

Grapes

No fruit is so absolutely universal as the Grape. It is mentioned by all great travelers and historians and is found in every clime except the two extremes. The earliest settlers in the United States found it growing from Maine to Florida, and having been constantly improved, everyone can grow it who will, and no home plot is too small at least for all that is needed for family use.

Black Grapes

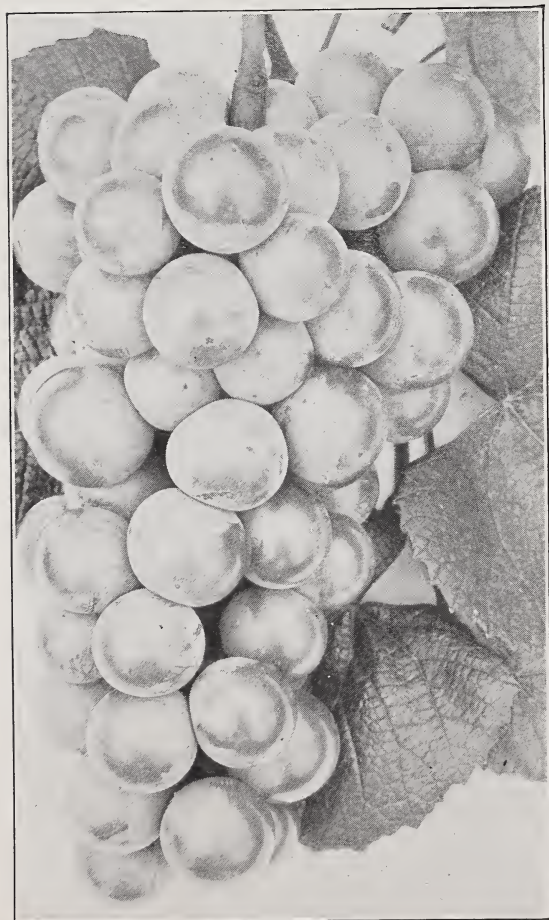
CAMPBELL'S EARLY.—Hardy, vigorous grower, therefore suitable for trellis. Foliage heavy, very healthy. Ripens very early and abundantly. Quality of fruit excellent. Fruit matures at intervals between the middle and last of August. A good shipper. Fruit large, of black color, covered with beautiful blue bloom. Sweet and juicy. Seeds small and few in numbers.

CONCORD.—The best known and most popular of all Grapes. Best for table, wine and market; succeeds over a great extent of country. Ripens in September.

MOORE'S EARLY.—Bunch medium; berry round and as large as the Wilder or Rodgers' No. 4. Color black, with a heavy blue bloom; quality very fine; vine exceedingly hardy. It has been entirely exempt from mildew or disease, in vigor of growth it is medium. Its earliness makes it desirable for a first crop, maturing as it does, ten days before the Hartford and twenty days before the Concord.



Concord Grapes.



Niagara Grapes.

WORDEN.—A seedling from the Concord, which it greatly resembles in color and appearance. It is, however, several days earlier; much more delicious and melting and has a flavor that is equaled by no other Grape grown. Berries and clusters are very large and compact; fully as hardy as the Concord and more productive. A sure bearer. Valuable market sort.

Red Grapes

BRIGHTON.—A cross between Concord and Diana Hamburg. Resembles Catawba in color, size and form of bunch and berry. Flesh rich, sweet and of the best quality. Ripens earlier than the Delaware. Vine vigorous and hardy. This variety has now been thoroughly tested, and it may now be truly said to be without an equal among early Grapes. Succeeds best when planted near other varieties of Grapes.

CACO.—This is a hybrid produced from cross pollenization of Catawba and Concord. It inherits the characteristics of both parents minus any of their defects. Very hardy and equals in high quality and melting texture the finest varieties grown under glass. Berry large, wine-red with abundant bloom. Bunch good size, compact, and of good form. Ripens in advance of Concord. Vine strong, vigorous, healthy and prolific.

DELAWARE.—Still holds its own as one of the finest Grapes. Bunches small, compact, shouldered; berries rather small, round; skin thin, light red; flesh very juicy, without any hard pulp, with an exceedingly sweet, spicy and delicious flavor. Vine moderately vigorous, hardy and productive. Ripens right after Brighton.

SALEM.—Bunch large; berry large, round; flesh tender, juicy with a rich, aromatic flavor; slight pulp; good keeper.

White Grapes

GREEN MOUNTAIN.—Color greenish white, skin very thin; pulp exceedingly tender and sweet; contains but one or two seeds which separate from the pulp with slight pressure; quality superb. Ripens with Moore.

NIAGARA.—This white Grape is justly regarded as one of the very best known; very fine quality for a table Grape; very prolific, hardy and of fine flavor. Fruit keeps well if carefully handled.

POCKLINGTON.—Vine very vigorous, hardy and productive; bunch and berry of good size; color a light lemon-yellow; flesh moderately tender, sweet, with a peculiar aromatic flavor. Ripens just ahead of Concord.



Black Raspberries

CUMBERLAND.—A mammoth midseason blackcap that holds its stout, stocky canes with handsome fruit. Its great, glossy berries are firm enough to ship well, and of good quality. In hardiness and productiveness, among the best.

GREGG.—Of good size; fine quality; very productive; an old reliable market sort; fairly hardy. Well known everywhere.

HAYMAKER.—We recommend this new Raspberry. It is an Ohio seedling of the tall, strong-growing Columbian type, with berries similar in color, size and texture, but a little more acid and produced in even heavier crops.

KANSAS.—Plant is a strong grower; fruit jet black, as large or larger than Gregg; a splendid yielder, and hardy. One of the very best. Ripens before Gregg.

PLUM FARMER.—It ripens its crop in a few days and is early enough to get the good prices. Perfectly hardy; is a good grower and productive. The berry is large and of a quality that makes it a good market berry.



Cumberland Raspberries.

Red and Yellow Varieties

COLUMBIAN.—An improvement on Shaffer, which it resembles, but the berry is firmer, adheres to the bush much longer, and retains its shape better, both on the market and for canning; color dull purplish red. Bush a strong grower, attaining a very large size. One of the hardiest and wonderfully prolific. Unexcelled for productiveness, stands at head for canning, making jam, jelly, etc. Should be planted two feet farther apart than any other variety.

CUTHBERT.—A remarkably strong, hardy variety; stands the northern Winters and southern Summers better than any other variety. Berries very large, conical, rich crimson, very handsome, and so firm they can be shipped hundreds of miles by rail in good condition; flavor is sweet, rich and luscious. The leading market variety for main crop.

GOLDEN QUEEN.—This variety is a seedling of the Cuthbert, but the color of the fruit is a rich golden yellow. The flavor is of the highest quality. Its size equal to the Cuthbert; immensely productive; a very strong grower; poor shipper.

HERBERT (Red).—One of the best red sorts. It has great vigor and hardiness, few suckers and is very productive. Ripens same season as Cuthbert, but fruit is larger, rounder and unfortunately a little softer. But the berries are firm enough to carry to nearby markets with ordinary care. Quality good.

KING (Red).—Considered one of the best early red Raspberries for the Central West. Most productive in clay loam. Fruit early, medium size. Color light red. Flesh soft, tender. Quality rather poor.

Everbearing Raspberries

ST. REGIS (Red).—Fruit commences to ripen with the earliest and continues on young canes until October. Berries bright crimson, large size, rich, sugary, with full Raspberry flavor. Flesh firm and meaty; a good shipper. Wonderfully prolific. Canes stocky, of strong growth, with abundance of dark green, feathery foliage.



Cuthbert Raspberries.



Eldorado Blackberries.

Blackberries

BLOWERS.—Originated in the celebrated small fruit belt of Chautauqua County, N. Y. One of the hardiest, most productive, of the finest quality and brings on the market the highest price of all Blackberries.

ELDORADO.—H. E. Van Deman recommends this variety thus: "This berry was noted last year, and is of much promise." It is an oblong, irregular berry of large size, fruiting in pendulous, slender, hairy spikes with few thorns. Color black; flesh deep crimson, with tender core; flavor sweet, rich quality and very good.

ERIE.—Very large, jet black and early. Perfectly hardy, a strong grower and a great bearer, producing large, sweet berries earlier in ripening than any other sort.

RATHBUN.—Very large, jet black, without hard core; small seeds, extra fine quality; very rich aroma. Plant suckers very little. Very hardy. Ripens early.

SNYDER.—Extremely hardy; enormously productive; medium size; no hard, sour core; very few thorns and they are nearly straight and short. One of the hardest sorts and most profitable for market.

Dewberries

One of the trailing Blackberries. Fruit is large, soft, sweet, with no hard core. Valuable for family use.

Our Super-Selected Strains
of Fruits are
the Choicest in America.

Currants

Mr. John J. Thomas, in his American Fruit Culturist, says: "The Currant, from its hardiness, free growth, easy culture, great and uniform productiveness, pleasant flavor, early ripening, is one of the most valuable of our Summer fruits."

CHEERY (Red).—One of the most popular Currants. Vigorous and productive. Berries large but not always uniform. Quality good.

FAY (Fay's Prolific). (Red).—One of the best of the large-fruited red Currants. Clusters and berries are large and uniform. Of medium productiveness. Quality very good.

LONDON MARKET (Red).—For many years this variety has been fruiting in Michigan where it is now planted extensively and regarded as the best market variety of this great fruit state. Plant is extremely vigorous, with perfect foliage, which it retains through the season; an enormous cropper.

PERFECTION (Red).—A cross between Fay's and the White Grape, retaining the valuable characteristics of both. Beautiful, bright red; as large or larger than Fay's, holding its size to the end of the bunch; easy to pick; a superior bearer, less acid and of better quality than any other large Currant in cultivation.

PRINCE ALBERT (Red).—An old variety also known as *Rivers' Late Red*. Valued for its late fruiting season; large size and pleasing flavor. Vigorous but only moderately productive. Quality good for dessert purposes.

RED CROSS.—Large red berry, long clusters and the stem long with fruit at stem; flavor mild, sub-acid, excellent midseason. Growth vigorous, productive. Valuable variety.

WHITE GRAPE.—Very large; yellowish white, sweet or very mild acid; excellent quality and valuable for the table. The finest of the white sorts. Very productive.

WILDER (Red).—A new red Currant, with large, fine flavored fruit of a bright, attractive red color, even when over-ripe. The leading garden and market variety; a strong, vigorous, erect grower and a great yielder. Fruit as large as the largest; a good shipper. Best of all red Currants.



Fay's Prolific Currants.



Downing Gooseberries.

Gooseberries

COLUMBUS.—An American seedling of the English type; large size, color greenish yellow, smooth, and of fine quality; a strong grower, with large, glossy foliage. New.

DOWNING.—Fruit is much larger than the Houghton; roundish, light green, with distinct veins; skin smooth; flesh soft, juicy and very fine flavored. Vigorous and productive. The most valuable American sort.

HOUGHTON.—A vigorous American sort; very productive. Fruit medium, roundish, smooth, of a pale red color; tender, sweet and of a delicious flavor; very profitable for canning and catsup.

PEARL.—This variety differs from the Downing—one of its parents—only in the fruits, which have a different flavor.

RED JACKET.—A new red berry, larger than Downing; smooth, very prolific and hardy, quality and foliage the best. For years it has been tested by the side of the best American and English sorts, and is the only one absolutely free from mildew, either in leaf or fruit. Promises to be the variety we have so long been waiting for, equal to the best English kinds, and capable of producing large crops under ordinary cultivation wherever Gooseberries can be grown.

Mulberries

DOWNING'S EVERBEARING.—Very large, black, handsome, sweet, rich and excellent.

NEW AMERICAN.—Equal to Downing's in all respects and a much harder tree. Vigorous grower; very productive; the best variety for fruit; ripe from middle June to middle September.

RUSSIAN.—Very hardy; vigorous grower; valuable for feeding silkworms, etc. Fruit of small size, varies in color from white to black. Largely planted for hedges, windbreaks, etc., in western states. Plant Russian Mulberries for the birds.

Asparagus

See that the ground is well drained, naturally or otherwise; work it up fine and deep, and make it very rich with well-rotted barnyard manure. Place the plants eight inches apart in rows four feet apart. Spread out the roots in a trench made deep enough to permit their crown to be covered with three or four inches of mellow earth. Give the bed liberal dressings of manure at intervals. Do not cut for use until second season.

MARTHA WASHINGTON.—The result of careful breeding with the object of eliminating rust. This strain was introduced by the United States Department of Agriculture. Shoots are dark green, tips tight and firm, which do not branch out until well out of the ground. In fact, this variety is so superior that we have discontinued other varieties like Conover's Colossal and Palmetto, as they are so inferior to the Martha Washington.

Rhubarb or Pie Plant

Make the ground rich and deep as recommended for Asparagus. Plant four feet apart each way.

EARLY SCARLET.—Smaller than Myatt's but extremely early and of very highest quality. The best extra early sort for home or market.

MYATT'S LINNAEUS.—Those who have never grown this variety, which is of superior quality, will hardly recognize the old "Pie Plant." It is an early, tender variety without being in the least tough or stringy, with mild, sub-acid flavor.



Martha Washington Asparagus.

Strawberries

There are literally hundreds of varieties and most of them are good under certain conditions. We list all the really valuable sorts such as we would plant ourselves. You will not go wrong in planting any that we catalog. See instructions how to plant on page 16.

PERFECT AND IMPERFECT VARIETIES

There is sex in the Strawberry. Perfect flowering varieties planted alone will mature a crop of fruit. Imperfect flowering varieties should have perfect varieties planted with them at least one row of perfect for every two rows of imperfect to furnish pollen.

We indicate after each variety as follows: (Per.) for perfect varieties. (Imp.) for imperfect varieties.

Common or June Varieties

AROMA (Per.).—Held in high esteem because of its long fruiting season, good shipping qualities and large berries of firm texture. The plants are resistant to disease and very productive, and adapt themselves to a variety of soils. Quality very high. Fruiting season midseason until late.

BUBACH (Imp.).—Very productive, berries very large, handsome and of excellent quality. The foliage is very resistant to disease and the plants can endure very hot sun. One of the leading market varieties. Succeeds best on heavy soil. Midseason.

BUN'S SPECIAL (Per.).—A new meritorious variety of midseason planting. An exceptionally vigorous plant, making a great number of runners. The fruit is very large and splendid for marketing purposes.

DR. BURRILL (Per.).—A wonderful variety of Illinois origin known as the Million Dollar Strawberry. Improvement over the Senator Dunlap. Berries very large and uniform in shape. This great variety is a strong fertilizer and its season of blooming and fruiting is extra long. Large foliage of dark green color and very healthy. This is an excellent market variety for midseason fruiting.

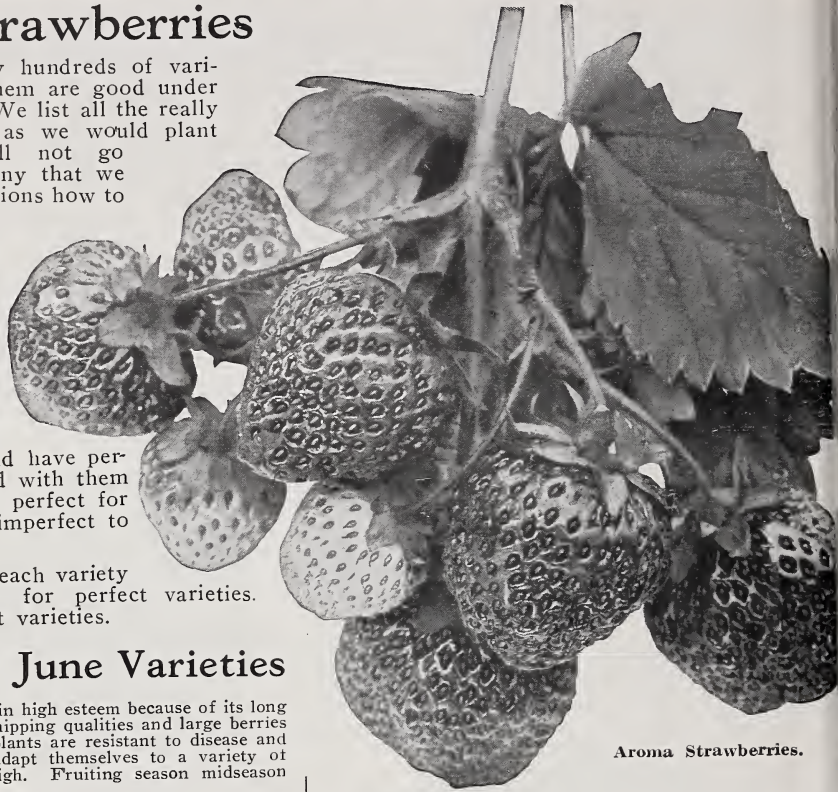
COOPER (Per.).—This is the largest and most productive Strawberry in cultivation. It is medium early, ripening along with Dr. Burrill and Gibson. Berries firm, solid, sweet.

DUNLAP (Per.).—A medium to large berry, slightly flattened, of a dark crimson shade. Flesh is red, fine in texture and quality excellent. The plant is hardy and a good grower. This variety has been in existence for 35 years and is still a favorite.

EXCELSIOR (Per.).—An excellent grower of good clean foliage, making large, stocky plants. Adaptable to many types of soil. Ripens very early and ships well.

GANDY (Per.).—Handsome deep red, firm fruit of good quality and late season, reaching the market at the very close of the season. It is a splendid fruit for canning or culinary purposes. In character of growth it is unsurpassed in foliage by no other variety. A very profitable market sort.

GIBSON (Per.).—One of the best and most profitable sorts for both home and market. Plants are strong growers with long roots and abundant foliage, exceedingly productive. Berries extra large, choice flavored, dark, glossy red clear through.



Aroma Strawberries.

HAVERLAND (Imp.).—The most productive large berry under cultivation. Season medium early until late. Plants very large, healthy, vigorous, and ripen their fruit evenly and early, holding on through the season. Berries are fine, uniform in shape, very large; excellent flavor and bright red.

LATE STEVENS (Stevens' Late Champion). (Per.).—Fruit late to very late. Vigorous but not always productive. Wedge-shaped. Crimson; flesh firm; quality good.

PREMIER (Per.).—The very earliest to fruit, continuous throughout a long season. Fruit large, of good color. Variety noted for its adaptability to varying soils and conditions. Flesh red to the center.

TENNESSEE PROLIFIC (Per.).—Medium size, long bright red, fine grained and juicy. Early and abundant bearer.

WARFIELD (Imp.).—A very hardy and healthy, productive plant. Fruits are desired especially for canning purposes, as they retain their color, shape and flavor very well when canned. Berries above medium in size, dark red to the center. A splendid market sort.

Everbearing Strawberries

PROGRESSIVE (Per.).—This is by far the best everbearing type. Many new varieties have been recently introduced but none have been able to equal or surpass Progressive. It is considered of superior quality and in our opinion it is best. Fruit is of good size and good color. Plants are very vigorous and healthy, giving splendid pickings of high quality berries for a long time. Fruit from the middle of July to the middle of November, according to season. To get best results from Everbearing Strawberries, for late season cropping, it is suggested that the flowers be picked off until about the middle of July.



Nut Trees

It is a well-known fact that our native Nuts do not take kindly to transplanting from nursery row. The black walnut, hickory nut, the butternut; all require a combination of good care, plus good luck if they are to grow and prosper. Fortunately, the Manchurian and Japan Walnuts solve all difficulty and possess the great characteristic in a nut of being very delicious, abundant bearers, and of exceptional hardness.

We believe the Manchurian Walnut and the Japan Walnut are two of the most valuable species of nuts and should be planted by every home owner. They grow with great vigor and are both good trees for ornamental purposes and shade, requiring no particular pruning or care.

On the average they begin to bear when they are about six years old. They bear the nuts in clusters—bear annually and it will not require a large number to provide all the nuts necessary for family use.

CHESTNUT, AMERICAN SWEET.—A valuable native tree, both useful and ornamental; timber is very durable and possesses a fine grain for oil finish. Nuts sweet, of delicate flavor and are a valuable article of commerce. Best adapted for sandy or gravelly soil.

WALNUT, BLACK.—This is the most valuable of all of our timber trees for planting; a rapid grower, producing a large nut. The timber enters more largely into the manufacture of furniture and cabinet ware than almost any other, and is prized almost with mahogany.

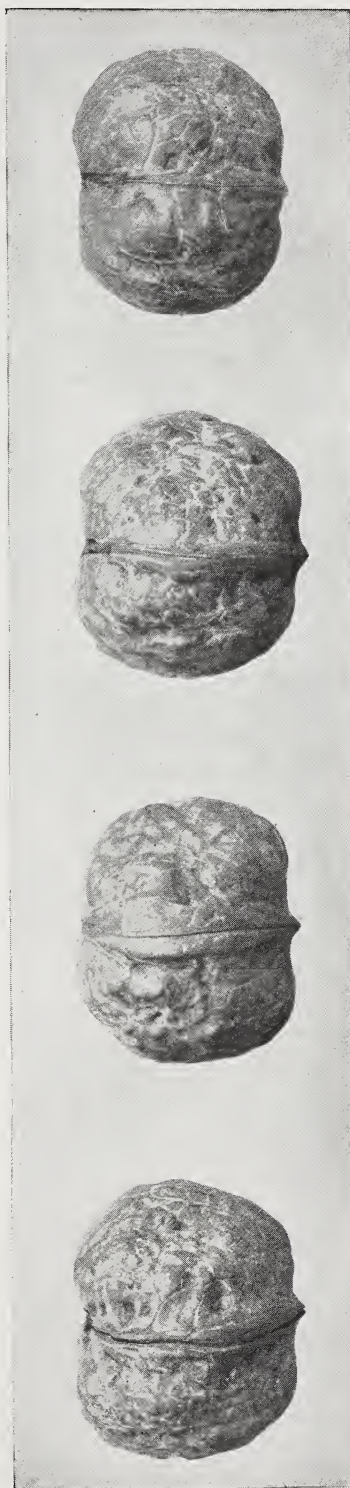
WALNUT, ENGLISH.—The well known English Walnut of commerce. Hardy as far north as New York. Makes a handsome, spreading tree. Nuts are delicious. Not so hardy as the Japan Walnut.

WALNUT, JAPAN (Siebold's Japan).—A most valuable species, which, on account of its hardness and vigorous growth is well adapted for our country. It grows with great vigor and is one of the best shaped trees for ornament and shade, without particular pruning or care. One of the most valuable of any nut for our country use.

MANCHURIAN WALNUT.—A most delicious nut of English Walnut type—thin shelled; nut kernel has a flavor equal to the best of the English Walnuts. Very much harder than the English Walnuts. Very much harder than the English Walnut type. Introduced from Manchuria where the temperature oftentimes reaches 15 degrees below zero. Bears very early and heavily. Plant 40 feet apart.



Japanese Walnuts.



Manchurian Walnuts, Natural Size.



A Block of Evergreens in Our Nursery.

Evergreens and Conifers

AS NEW beauties are being continually discovered in Evergreens, new uses develop also. They form perfect backgrounds for the flowering plants and shrubs of early Spring, for the berries of Autumn and as a tracery for the bright barks and twigs of Winter. Beautiful beds of permanent color can be formed by growing together sorts of moderate growth with contrasting foliage of which are the golden, the silver hues and the many shades and tints of green. Few trees or plants give so much cheer and add so much attractiveness to the Winter landscapes as do the pines, the spruces, and arbor-vitae and many other varieties of Evergreens.

Our Evergreens are all carefully grown for symmetrical development and are root- and top-pruned into handsome shapely specimens that will transplant successfully.

We dig and pack our Evergreens so that the root fibers are well protected and specimens will reach their destination in good, live condition. Care should be taken to keep the roots from drying out from exposure to the air and sun until planted. All specimen Evergreens are shipped you dug with ball of earth and a burlap protecting same about their roots. In planting Evergreens dig a hole large enough to take in all the roots and the ball of earth. After planting soak the ground around the tree thoroughly with water and apply a covering of good strong manure to retain the moisture around the tree. Shade the tree with paper or burlap for the first two or three weeks so that the hot sun cannot strike the tree directly until it has had a chance to start growing.

The price of Evergreens is graduated according to height and spread. Customers intending to purchase them in considerable numbers should come right to the nursery and select the trees. The trees will be tagged right in the block where they grow and will be dug and shipped at proper season if you will come and select them personally.

Abies - Fir

Abies balsamea (Balsam Fir).—A very erect, regular, pyramidal tree, with dark green, somber foliage. Grows rapidly and is very hardy.

A. concolor (White Fir).—Beautiful ornamental tree, very symmetrical but not stiff in appearance, long, soft needles; color a beautiful grayish blue. Especially desirable for tall backgrounds, screens or choice individual specimens. One of the finest evergreens of this type.

Biota - Chinese Arbor-Vitae

Biota (Oriental Arborvitae) (*Thuja Orientalis* S. P. N.) Bushy, upright in growth and very attractive. Branches arranged in flat vertical planes. Beautiful deep green color. Foliage very lacy. Semi-hardy.

Biota (Berckman's Golden Arborvitae) (*T. Orientalis aurea nana*).—Conical; foliage warm golden. For garden or foundation planting. Very slow growing and formal in habit.



Thuja Orientalis—Oriental Arbor-Vitae.



Juniperus Chinensis Pfitzeriana.

Juniperus - Juniper

- J. chinensis** (Chinese Juniper).—A very handsome upright, densely foliated cedar type. The color is a bright green at all seasons. One of the best green upright growing Junipers.
- J. chinensis aurea** (Golden Chinese Juniper).—One of the finest evergreens. Of spreading habit and with beautiful golden foliage.
- J. chinensis scopulorum** (Hill's Silver Juniper) (*J. scopulorum*).—Beautiful silvery blue color. Narrow, compact and symmetrical. It has one single stem in contrast to some varieties of Junipers with several stems. This makes it safe from heavy snows and wind. The inner foliage does not turn brown.
- J. chinensis Pfitzeriana** (Pfitzer Juniper) (*Hort. V. S. P. N.*).—The finest of all evergreens for foundation and border plantings. Its adaptability to various conditions and soils is remarkable. As to appearance, it is very graceful because of its low, irregular form. It has a blue-green cast to the foliage which when added to the graceful form makes it one of the most

beautiful and desirable evergreens in our entire list. Both the main stems and lateral shoots have a light, feathery appearance.

- J. chinensis procumbens** (Japanese Juniper).—A trailing form of *chinensis*, particularly well adapted for covering banks and for bordering.
- J. columnaris** (Blue).—A narrow, dense, pyramidal tree with foliage of bluish cast. It grows very dense and compact and is extremely hardy. A new introduction by the U. S. Department of Agriculture.
- J. canadensis** (Common Juniper).—A rather low, spreading plant extending along the surface of the ground, often to a distance of seven or eight feet in every direction, thus making it an excellent ground cover. The leaves are sharp pointed, gray-green with broad white bands on the upper surface, light silvery beneath. The plant is very vigorous and to be kept small must be trimmed.
- J. canadensis aurea** (Golden Juniper). (*Hort. V. S. P. N.*).—Similar to *Juniperus canadensis*; foliage, however, is a brilliant golden color which it holds during the entire year.



Juniperus Sabina—Savin Juniper.

- J. communis depressa aurea** (Prostrate Juniper).—Golden form of the *J. communis depressa*.
- J. communis suecica** (Swedish Juniper).—A small-sized handsome pyramidal tree, with yellowish green foliage. It is quite hardy.
- J. excelsa stricta** (Spiny Greek Juniper).—A very symmetrical conical outline which on account of its slow growth and dense habit is desirable for foundation plantings, rock gardens, etc.
- J. hibernica** (Irish Juniper).—A distinct and beautiful variety, of erect, dense, conical outline, resembling a pillar of green; very desirable.
- J. horizontalis Douglassi** (Hill's Waukegan Juniper).—The most attractive creeping form; very low and compact, making a dense mat. Soft, blue color in the spring and summer, changing to a rich purple in late fall. Grows close to the ground, not over 6-8 inches high. It spreads out a dozen feet or more, depending on the soil. An excellent ground cover or rock creeper for Japanese garden planting.
- J. glauca** (Silver Red Cedar).—The compact, conical habit of this variety, combined with its silvery-bluish foliage, render it very distinct and desirable.
- J. Sabina** (Savin Juniper).—A very dark green spreading type of the Juniper family. Ideal for foundations, for groups or low borders.

Juniperus—Continued.



Juniperus Virginiana—Red Cedar.

- J. Sabina prostrata** (Waukegan Juniper).—Blue creeping type of Juniper family. A dense mat over the surface of the ground, not growing over 6 or eight inches in height. Its growth is distinctly horizontal.
- J. Sabina tamariscifolia** (Tamarix Savin).—A distinct, trailing variety of *Sabina*. The needle-shaped leaves have a deceptive but pleasing shade of gray-green. Fine for edging.
- J. scopolorum** (Colorado Juniper).—Narrow, compact, symmetrical Juniper, having single stem, and is somewhat similar to the Irish Junipers. Trees are various shades of green and blue, most of them having a decided silvery cast. It grows 15-20 feet high when fully matured, but never spreads out more than 2-3 feet wide.
- J. virginiana** (Red Cedar).—A well known American tree; varies much in habit and color of foliage, some being quite stiff, regular and conical, and others loose and irregular. It makes a fine ornamental hedge plant.
- J. virginiana Cannarti** (Cannart Red Cedar).—A fine, pyramidal, compact grower of dark green appearance; some of the branches lengthen out and droop, thus presenting a novel and pretty picture.
- J. elegantissima** (Gold Tip Red Cedar).—Forms a columnar tree, while the side branchlets curve over effectively. Beautiful golden brown foliage; effective in winter; very distinct.
- J. virginiana Schotti** (Schott Red Cedar).—A fine hardy evergreen of columnar habit; foliage light green and feathery. Similar in growth to *J. glauca*, thereby a very desirable type.

Larix - Larch

- L. europaea** (European Larch).—An elegant, rapid and pyramidal growing tree, with light green foliage; drooping habit; valuable as a lawn tree.



Evergreens are Ideal for All-Year Effects.



Picea - Spruce

- P. canadensis** (White Spruce).—A native tree of medium size, of pyramidal form. Foliage silvery gray, and bark light colored. Very hardy and valuable.
- P. Douglassi** (Douglas Spruce).—Large conical form, branches spreading, horizontal, leaves light green above, glossy blue tint below. A rapid growing evergreen tree, valuable for its hardiness and adaptability to many situations and especially for its beauty.
- P. Engelmanni** (Engelmann Spruce).—Very ornamental as specimen. Forms a dense and narrow pyramid when young.
- P. excelsa** (Norway Spruce).—From Europe. An elegant tree; extremely hardy, of lofty, rapid growth and pyramidal form. The branches assume a graceful, drooping habit when the tree attains 15 to 20 feet in height. One of the most popular evergreens for planting, either as single specimen trees or in masses for effect or shelter. It is one of the best evergreen hedge plants.



Black Hills Spruce.



Koster's Blue Spruce.

- P. mariana** (Black Hills Spruce).—A form of the White Spruce, a native of the Black Hills country of South Dakota, and resembles its parent, the White Spruce, very much except that it is somewhat slower in growth and a little more compact. Its color, too, is even more silvery than the White Spruce, sometimes even rivalling the Blue Spruce. It is hardy, easily transplanted, and a great favorite everywhere.
- P. pungens glauca** (Blue Colorado Spruce).—American origin. One of the hardiest and most beautiful of all the Spruces. In form and habit similar to *Picea canadensis*. Foliage of a rich blue or sage color.
- P. pungens glauca Kosteriana** (Koster Blue Spruce). Similar to the Blue Colorado Spruce, except that the foliage is a much brighter blue. Very rare.
- P. Remonti** (Remont Spruce).—A dwarf form, slightly inclined to fastigate shape; compact and hardy.

Pinus - Pine

- P. montana mughus** (Mugho Pine).—Our strain is a genuine true dwarf form, many compact stems and with good dark green foliage which is retained throughout the winter. Never grows over four feet high, and not that height until obtaining a considerable age.
- P. nigra** (Austrian Pine).—Tree remarkably robust, nardy and spreading; leaves long, stiff and dark green; growth rapid. The most valuable for this country.
- P. ponderosa** (Bull Pine).—An extremely handsome ornamental tree with long needles of deep green color on the surface, tinted bluish-white underneath. This is the most widely distributed evergreen in North America.
- P. strobus** (White Pine).—The most ornamental of all our native pines; foliage light, delicate or silvery green. Flourishes in the poorest light sandy soil. Very valuable.
- P. sylvestris** (Scotch Pine).—A native of the British Islands. A fine, robust, rapid growing tree, with stout, erect shoots and silvery green foliage. Very hardy; valuable for shelter.



Pinus Mughus—Dwarf, or Mugho Pine.



Globe Arbor-Vitae.

Thuja - Arbor-Vitae

- T. occidentalis** (American Arbor Vitae).—A beautiful native tree commonly known as the White Cedar; especially valuable for screens and hedges.
- T. occidentalis Ellwangeriana** (Tom Thumb Arbor-Vitae).—A heath-leaved dwarf variety. Grows in ball form and is well adapted to pruning in globular form. Beautiful for bordering driveways, walks and formal garden work.
- T. occidentalis globosa** (American Globe Arbor-Vitae).—A dense, light green evergreen of dwarf habit, grows naturally round like a ball. One of the best of the dwarf.
- T. occidentalis aurea Hoveyi** (Hovey Arbor-Vitae).—Is a distinct, compact, hardy American seedling; dense and conical with light, golden green foliage.
- T. occidentalis aurea** (Golden Oriental Arbor-Vitae).—Same habit as *occidentalis* except for the color, which is a beautiful bright golden yellow. Fine for specimen planting.
- T. occidentalis Douglassi** (Douglas Pyramidal Arbor-Vitae).—A comparatively new variety chiefly valuable on account of its crested foliage, deep dark green in color. Will attain a height of 15 feet.
- T. occidentalis pyramidalis** (American Pyramidal Arbor-Vitae).—A tall, slender column of dark green, resembling the Irish Juniper in growth; retains its color in the winter. Very hardy, will stand severe shearing.
- T. occidentalis sibirica** (Siberian Arbor-Vitae).—This is one of the most useful and hardy evergreens for the northern states. Its excessive hardness, regular conical outline and peculiar dark, dense foliage, make it very popular for hedges or screens and is especially beautiful and more attractive than the other species.
- T. occidentalis Vervaeana** (Vervae Arbor-Vitae).—Of compact broad pyramidal habit and green foliage.
- T. occidentalis Woodwardi** (Woodward Arbor-Vitae).—One of the best globe forms of the Thuyas.

NOTE.—For Chinese Arbor-Vitae refer to Biota.

Retinispora - Japan Cypress

- R. aurea** (Golden Pea-fruited) (Golden Plume).—A fine pyramidal, bright golden form; popular and graceful.
- R. obtusa** (Obtuse-leaved Retinispora). (*R. chamaecypariss obtusa*).—Dark fern-like foliage; distinct and beautiful; habit drooping and graceful.
- R. pisifera** (Silver Tip).—An upright tree; foliage light green and feathery; the branches are somewhat pendulous at the ends.
- R. pisifera plumosa** (Plume Retinispora).—Useful for specimens or hedges; foliage light green and plume-like; extensively planted.

Taxus - Yew

- T. canadensis** (Canada Yew).—Of low spreading habit, foliage dark green.
- T. cuspidata** (Japanese Yew).—Dense growing. One of the hardest; habit spreading; foliage deep green.
- T. cuspidata brevifolia** (Spreading English Yew).—A form of Yew with short, dark green leaves. A very handsome, hardy variety. Rare.

Tsuga - Hemlock

- T. canadensis** (Canada Hemlock).—A broadly pyramidal, medium sized tree of dense growth, with rich green foliage. Branches thickly set, with more or less pendulous tendency, giving a particularly graceful effect to the whole. Choice as a single lawn tree or for hedge purposes, succeeding in all except particularly bleak situations.



An Effective Use of Globe and American Arbor-Vitae.



Trees Add Beauty as Well as Value to Your Property.

Deciduous Trees

TREES and shrubs are the natural framework—and the lawn the setting of every landscape picture. With trees and shrubs we emphasize certain natural features of the earth's contour, screen an unsightly view, and give the skyline a most interesting outline, and it is possible by careful and judicious planting to give even a small piece of property an extensive appearance. Trees not only add to the beauty of the surroundings, but also offer their cooling and refreshing shade during the hot Summer months and we all know that under their delightful branches some of the happiest days of life are spent.

The planting of the right varieties for a harmonious combination and for adaptability and hardiness requires considerable knowledge of tree life. A great deal of money is wasted each year just through ignorance of what is required in the way of soil, drainage and protection for a tree in its new location. The planting of trees is a more serious problem than it at first appears. A big mistake often made by the inexperienced landscape gardener is to plant too closely, but it is not to be wondered at when you stop to think what a complete knowledge of tree growth is necessary to the proper handling of them.

As in all branches of horticulture right selection of varieties should be made for best results. Soil conditions and drainage are factors which must be considered in making your selection. We'd be glad to advise you if you care to give us details.

Possibly, all things considered, the American Elm (ULMUS AMERICANA) will succeed in a greater variety of soils than any other deciduous tree. The Elm is indeed a most beautiful tree. It attracts by reason of its majestic appearance. It is desirable because of its rapid growth and fortunate indeed are those property owners in any city whose street is lined with the American Elm.

Other trees have their places and in some situations are more desirable, but for the greater number of home-owners the Elm is the most satisfactory.



Acer Dasycarpum—Silver Maple.

Ailanthus

A. glandulosa (Ailanthus).—An extremely quick-growing tree; 60 feet tall and tropical looking with pinnate, palm-like leaves. Valuable because it thrives in smoky cities and in soils where other trees perish.

Alnus - Alder

A. glutinosa (European Alder).—Foliage roundish, wedge-shaped, wavy. Remarkably quick in growth; 30 to 60 feet high.



Acer Wieri Laciniatum—Wier's Cut-Leaf Maple.

Acer - Maple

Trees of this group are hardy, vigorous, adaptable to many soils, free from diseases, easily transplanted, regular in outline and beautiful in leaf. Nearly all are brilliantly colored in Fall, especially the North American species.

A. dasycarpum (Silver Maple).—Of quicker growth than most trees, and valuable where immediate shade is required. Forms a large, spreading head; the fine leaves are silvery beneath.

A. dasycarpum Wieri laciniatum (Wier Maple).—A very beautiful specimen tree, with delicately cut leaves and distinct, hair drooping habit. The leader grows rapidly upright, while the slender lateral branches curve gracefully downward.

A. negundo (Box Elder).—This species is easily distinguished by its pinnate leaves and greenish yellow bark. It grows rapidly into a large, spreading tree, 70 feet high. Found valuable for planting and timber claims, shelter-belts, etc., in the west, where it endures both drought and cold.

A. platanoides (Norway Maple).—A handsome tree, of large, fairly rapid growth, 80 to 100 feet, forming a dense, rounded head of strong branches and broad, deep green leaves, sturdy, compact, vigorous, it is one of the very best trees for lawns, parks and gardens.

A. platanoides Schwedleri (Schwedler Maple).—The Purple Norway Maple's beautiful leaves attract attention at all seasons, but are especially fine in Spring, when their gleaming red and purple contrasts brightly with the delicate green of other trees. In midsummer they are purplish green, in autumn golden yellow.

A. pseudo-platanus (Sycamore Maple).—A broad, handsome tree of medium size, rarely over 60 feet high, with larger, darker leaves than other Maples. Casts dense, cool shade.

A. rubrum (Red Maple).—Excellent habit, scarlet flowers in early spring; dense foliage, gorgeous color in autumn.

A. saccharum (Sugar Maple).—This tree is chieftain of its kind, straight, spreading, symmetrical, of grand proportions, often 120 feet in height, and longer lived than most men who plant it. It grows well in all except damp, soggy soils, and roots deeply, allowing the grass to grow close about its trunk. Its leaves have very rich Autumn tints of clear yellow and scarlet.

A. palmatum atropurpureum (Red Japanese Maple).—Hardy. Leaves blood-red in spring, changing to dark purple; pretty throughout the season. Very dwarf growing.

A. spicatum (Mountain Maple).—Shrub or small tree, valuable as undergrowth or screen. Leaves rough and broad, turning yellow and scarlet in the Fall.



Acer Platanoides—Norway Maple.

Aralia

A. spinosa (Devil's Walking Stick).—A showy native with broad, handsomely cut leaves and huge clusters of small white flowers in July. Its winter effect is unique and handsome. Grows to 30 or 40 feet high.

Betula - Birch

B. alba (European White Birch).—This is the famous birch of literature, growing sometimes 80 feet high. Quite erect when young, its branches begin to droop gracefully with age. Its bark is snow-white and very effective in landscape views, especially if grown in front of dark evergreens. (Note: When young the bark of this variety is gray).

B. alba laciniata pendula (Cutleaf Weeping Birch).—One of the most popular of the weeping trees. Foliage deeply cut, drooping in the most picturesque manner; silvery white bark; vigorous growth.

B. lutea (Yellow Birch).—Bark is silvery gray or light orange; leaves hairy along the veins beneath; one of the most valuable forest trees in the Northern States. A blaze of gold in autumn. Height 60 feet.

Carpinus - Hornbeam

C. caroliniana (American Hornbeam).—Shrubby tree, good foliage. Valuable for screen or hedge.

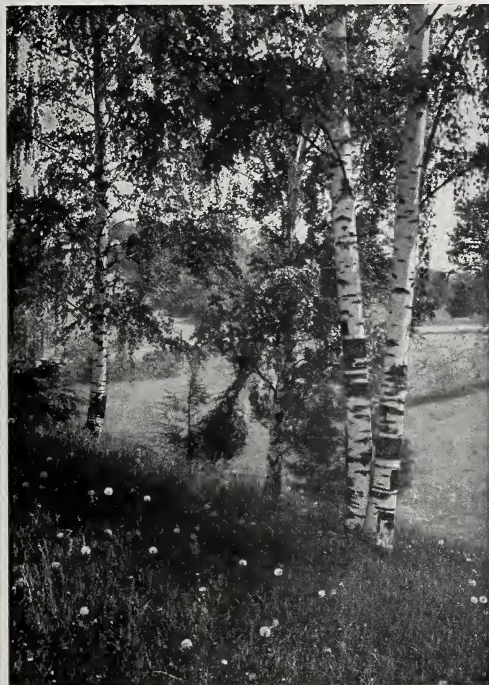
Catalpa

C. Bungei (Manchurian Catalpa).—A curious dwarf Catalpa. It is very useful in formal work when grafted on stems of the *Catalpa Speciosa*, forming a pretty, dome-shaped head 10 to 12 feet high, of great soft, heavy leaves. The flowers are borne in large clusters a foot long; the leaves are laid with shingle-like precision. Hardy, strong-growing, unique.

C. speciosa (Western Catalpa).—A fine, hardy sort, well adapted for forest and ornamental planting. The coarse-grained soft wood is very durable and useful for railroad ties, fence-posts, etc. Blooms earlier than the others and grows to be a large tree 100 feet high.



Aralia Spinosa.



Cut-Leaved Weeping Birch.



Catalpa Bungei—Chinese Catalpa.



Cornus Florida.

Celtis - Hackberry

C. occidentalis (Hackberry).—A rare native tree that deserves much more general planting. It grows 100 to 120 feet high and its light green leaves are glossy, pointed, almost entirely free from insects; the branches spread horizontally, forming a wide head of medium size. Vigorous, hardy and healthy, thriving in all soils.

Cerasus - Prunus

A very ornamental family of trees. The drooping varieties are especially adapted to beautify small grounds. As single specimens on the lawn they are unique and handsome and require only to be better known in order to be extensively planted.

C. padus (*C. prunus padus*).—One of the earliest of all trees to leaf out in the Spring. Makes a shapely tree of 10 to 20 feet. Beautiful when in bloom in May.

C. serotina (*C. prunus serotina*).—Strong, straight tree, oftentimes reaching the height of 100 feet. Flowers when leaves are full grown. Fruit size of a pea, purplish black when ripe in late Summer. Valuable for a lawn tree.

C. virginiana (Choke Cherry).—Tall shrub with rough speckled bark. Blooms with coming out of leaves. Fruit red or amber colored, the size of a pea in Summer. Valuable in landscape work.

Cercis - Redbud

C. canadensis (American Redbud).—The hardiest and perhaps the finest species of a handsome group of early and profuse flowering trees. Medium height, 20 to 30 feet, forming a broad, irregular head of glossy, heart-shaped leaves that color pure yellow in Fall. It blooms in earliest Spring, with dogwoods and magnolias, and is valuable for grouping with them. Its masses of small, delicate rosy purple flowers wreath the leafless branches so thickly as to give very fine contrasts and cheery Spring effects. Must be transplanted when small.

Chionanthus - Fringe Tree

C. virginica (White Fringe).—A small native tree or shrub, of roundish form, with large glossy leaves and drooping racemes of pure white flowers, having narrow, fringelike petals; blossoms in May or June. A superb lawn tree.

Cornus - Dogwood

C. florida (Flowering Dogwood).—The great white flowers are three inches or more in width, lasting in favorable weather for as many weeks. Besides the fine characteristics given above, the bright red bark on its young growth makes it attractive and cheery in Winter. Tree rarely grows over 20 feet in height, and is branching in habit. Blooms when small. Rather hard to transplant with success.

C. florida flore rubra (Red Flowering Dogwood).—A variety producing flowers suffused with bright red. Blooms when quite young. One of the finest flowering trees.

Crataegus - Flowering Thorn

The low, dense, peat habit of the thorns adapts them for planting in small yards and for grouping anywhere. Are very hardy and grow well in all dry soils. The foliage is varied, always attractive, handsome and almost evergreen in some cases; the flowers are showy and abundant, often quite fragrant; the fruits are retained long in some species, are so thick as to burden the branches and frequently of bright color. Their foliage colors brilliantly in Fall.

C. coccinea (Thicket Hawthorne).—A fine native variety, blooms in May, producing white blossoms, succeeded by scarlet foliage.

C. cordata (Washington Hawthorn).—Blooms May and June. Fruits September and October. A very desirable species with beautiful Fall coloring and clusters of bright red fruit remaining a long time on the branches. Excellent for hedges.

C. crus-galli (Cockspur Thorn).—A dwarf tree rarely over 20 feet high, with widely extending horizontal branches, giving it a flat-topped effect. The leaves are thick, glossy, coloring with tinge of red, opening in May; fruits showy scarlet, persistent until Spring.

C. mollis (Downy Hawthorne).—Bright green leaves, showy flowers and scarlet fruit.

C. oxyacantha (English Hawthorn).—Rapid grower with single white flowers in Spring followed by scarlet fruit. Excellent for a hedge plant.

C. Pauli (Paul's Double Scarlet Hawthorn).—A tree of unusually fine habit, rich, luxuriant foliage; flowers very double, in great profusion of deep crimson color with scarlet shade almost completely covering the entire foliage bearing area.



Crataegus Pauli—Paul's Double Scarlet Hawthorn.



Cytisus - Broom

C. laburnum vulgare (Broom).—A native of Europe, with smooth and shining foliage. Bears yellow flowers, which appear in June.

Fagus - Beech

The Beeches are noted for their rich, glossy foliage and elegant habit. The purple-leaved, cut-leaved and weeping Beeches are three remarkable trees, beautiful even while very young, but magnificent when they acquire age. As single specimens upon the lawn they exhibit an array of valuable and attractive features not to be found in other trees.

F. americana (American Beech).—One of the finest American trees.

F. purpurea Riversi (Rivers' Beech).—Compact, symmetrical habit of growth and crimson foliage early in Spring, changing to dark purple in Summer. The finest of all purple-leaved trees.

F. sylvatica (European Beech).—A beautiful tree attaining a height of 60 to 80 feet.

Fraxinus - Ash

F. americana (American White Ash).—A well known native tree. Height 100 feet.

Gleditsia - Honey Locust

G. triacanthos (Common Honey Locust).—Good for park or street planting and makes impenetrable hedges if planted thickly and pruned severely. Bears small pink flowers in May in racemes followed by pods often 18 inches long. Height 60 feet.



Liquidambar Styraciflua—Sweet Gum.



Fagus Sylvatica Purpurea Riversi—Rivers' Purple Beech.

Gymnocladus

G. dioica (Kentucky Coffee Tree).—A picturesquely irregular tree 100 feet high, with peculiar rough-barked, twigless branches, and broad fronds of twice-pinnate foliage of a peculiar bluish green. Bears long racemes of white flowers in early summer. The familiar name is from the seeds in its broad beans, which were once used for coffee in the southern mountains. Yellow in fall.

Juglans - Walnut

Refer to page 55.

Koelreuteria - Varnish Tree

K. paniculata (Golden Rain Tree).—From China. Desirable lawn tree; has large pinnate leaves; in July produces a mass of showy orange-yellow flowers, followed by curious seed vessels.

Larix - Larch

Refer to Evergreens and Conifers. Page 58.

Liquidambar

L. styraciflua (Sweet Gum).—A tree that is beautiful at all stages and useful in all sorts of plantings. It has a narrow, ovate head, formed of short, corky-winged branches and masses of star-shaped, lustrous leaves that color to intense crimson-scarlet in Fall. Even in Winter its odd, swinging seed balls and cork-winged branches make it picturesque and interesting. The name is from its fragrant sap and leaves.



Morus—Teas' Weeping Mulberry.

Liriodendron

L. tulipifera (Tulip Tree).—A tall, magnificent native of rapid pyramidal growth to 100 feet. Its smooth, erect gray trunk rises to a great height and is clothed with a splendid vesture of large, glossy leaves, spangled in Spring with large tulip-shaped flowers of greenish yellow and orange. One of our most distinguished tall trees, for broad avenue, parks and lawns.

Magnolia - Cucumber Tree

M. acuminata (Cucumber Tree).—A tree of large pyramidal growth. The fruit resembles a small cucumber when young, but when ripe is of a deep scarlet. The leaves are large, deep green. Flowers yellow, tinged with bluish purple.

MALUS—See Pyrus.

Morus - Mulberry

M. tatarica (The Russian Mulberry).—A very hardy variety with reddish fruit.

M. alba pendula (Teas' Weeping Mulberry).—One of the best of small weeping lawn trees, forming a perfect umbrella-shaped head. Foliage light green, deeply lobed. Fruit reddish purple. Thrifty and hardy.

Persica - Peach

GREENING'S BLOOD-LEAVED PEACH (*P. sanguineaefolia*).—A distinct and beautiful addition to the list of trees affording contrast in the shrubbery border. Size and habit similar to the peach, but foliage a handsome blood-red.

Platanus - Plane Tree, Sycamore

P. orientalis (Oriental Plane).—One of the oldest cultivated trees and among the best for street and avenue planting. It grows rapidly to grand size, is bold, picturesque, healthy, free from insects, vigorous in all soils, especially along the water's edge. A lofty, wide-spreading tree, growing 60 to 80 feet tall, with large, leathery, clear-cut leaves that turn yellow in Fall.



Liriodendron Tulipifera—Tulip Tree.



Pyrus - Flowering Crab

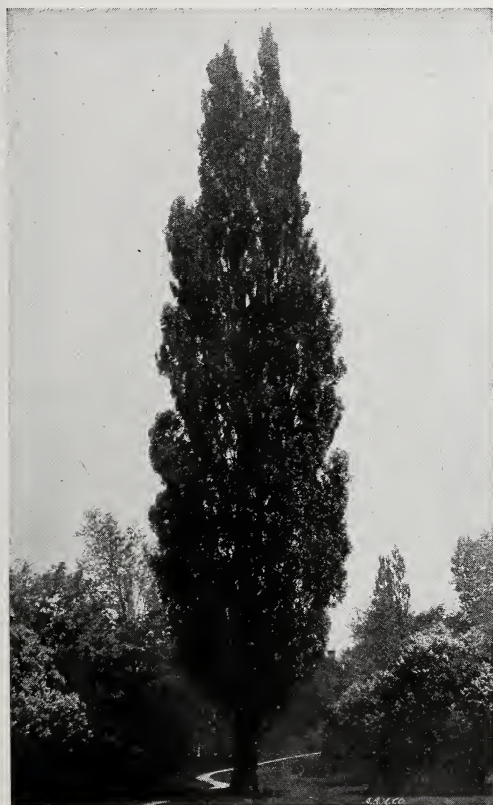
- P. malus angustifolia** (Bechtel Crab).—A low, bushy tree, rarely over 20 feet in height. It is the most beautiful of all the fine varieties of Flowering Crabs. At a distance the tree seems to be covered with dainty little roses of a delicate pink color. Blooms when quite young. Is very fragrant.
- P. malus floribunda** (Japanese Flowering Crab).—Small tree producing a profusion of single flowers in May. The flowers are a beautiful carmine in bud, white when open, followed by very ornamental fruit in Autumn.
- P. malus Parkmani** (Parkman Crab).—Habit dwarf; a compact grower. Foliage dark green, remaining late on the tree. Flowers very double, dark rose, drooping, and retain their color until they drop from the tree. A beautiful variety.



Pyrus Malus Angustifolia—Bechtel's Crab.

Populus - Poplar

- P. Bolleana** (Bolleana Poplar).—Similar to the well-known Lombardy Poplar in habit, but broader, and like it useful in breaking the monotony of lower round-topped trees. Will grow to a tall spire, 80 feet high. Its leaves are glossy green above, silvery beneath. A favorite with landscape gardeners.
- P. deltoides monilifera** (Carolina Poplar).—Unexcelled for quick growth and effect, its rapid growth giving an air of luxuriance to places where other trees appear starved. Showy and cheery from the constant movement of its glossy, silver-lined leaves, yet always casting a dense, cool shade. If well pruned back during the first few seasons it makes a strong, durable tree, 60 to 80 feet high.
- P. nigra italica** (Lombardy Poplar).—Attains a height of from 100 to 150 feet. Well known and remarkable for its erect, rapid growth and tall, spiry form. Indispensable in landscape gardening, to break the ordinary and monotonous outline of most other trees.



Populus Nigra Italica—Lombardy Poplar.

Prunus - Plum, Flowering Plum

- P. cerasifera Pissardi** (Purple Leaf Plum). (*Hort. V. S. P. N.*).—A charming shrub or small tree, 3 to 5 feet high, of spreading, vigorous growth. Very early in Spring, before the leaves appear, the whole tree is decked in a fleecy cloud of very double, light pink blossoms. Its effect on a still leafless landscape is very bright.
- P. padus** (European Bird Cherry).—A rapid growing, beautiful tree, with glossy foliage and long bunches of white, fragrant flowers in May, succeeded by clusters of fruit like black currants.
- P. triloba flore pleno** (Double Flowering Plum).—A distinct and handsome little tree, rarely over 20 feet high, covered with a mass of small white single flowers in Spring, later with showy pinkish purple leaves that deepen in color to the end of the season. Valuable for ornamental hedges or planting in quantity for contrast. It is perfectly hardy wherever the common plum will stand and is a unique and beautiful ornament to the lawn at all times of the year.
- P. virginiana** (Common Chokeberry).—Bush or small tree not over 30 feet. Bark rough and speckled. Flowers in Spring when leaves appear in short, dense racemes.

Quercus - Oak

Although their growth at first is slow, if planted in good soil the Oaks will outgrow many other trees. For wide lawns, parks and public grounds, avenues, etc., where they have room to develop, few trees are so majestic and imposing, so enduring, so varied in expression. Their great vigor and hardihood enables them to withstand many untoward conditions.

- Q. palustris** (Pin Oak).—Almost pyramidal in habit and sometimes described as half-weeping when old, because its lower branches touch the ground. It grows and develops the family characteristics faster than most Oaks, as may be seen from some fine avenues, planted within the last score of years. It grows 60 to 80 feet, sometimes taller. The leaves are deep green, glossy and finely divided. Orange-scarlet in Fall.
- Q. robur** (English Oak).—The Royal Oak of England, a well known tree of spreading, slow growth.
- Q. rubra** (Common Red Oak).—Stately, spreading, symmetrical; leaves shining deep green, rich Fall color. A most beautiful tree for the lawn.



Salisburia—
Ginkgo.

Salisburia - Ginkgo

S. ginkgo.—A distinguished Japanese tree, 40 to 60 feet high, of columnar growth when young, spreading with age into an odd sketchy outline. Its thick, leathery leaves are clear-cut and shaped like the leaves of the Maidenhair Fern. A rare and elegant tree that is yet robust enough to endure general city planting. Its unique appearance and habit of growth make it a valuable acquisition. Grows fast; has no insect or fungous enemies.

Sophora

S. japonica (Chinese Sholartree).—An odd and unique specimen tree, 40 to 60 feet high, so different from other trees in style of growth that it always attracts attention. Its short branches form a dense, round head. In August its shining green leaves are decked with clusters of white blossoms.

Sorbus - Mountain Ash

Medium-sized tree, with handsome, pinnate leaves, neat habit and showy crops of bright red berries, persistent until late in Winter, giving a brilliant note to the Autumn landscape.

S. aucuparia (European Mountain Ash).—Hardy, erect, 20 to 30 feet high, with smooth bark and dense, regular heads; berry clusters large and bright.

S. pendula (Weeping Mountain Ash).—This variety has long, slender branches which are recurving and form a parasol-like arrangement. Very choice as a specimen tree for lawns.

Salix - Willow

Besides the beauty of their airy Summer foliage the Willows have a distinct value in the brightness of their bark when leaves have fallen. There are few trees that can be used to such advantage for cheery Winter effects. They grow fast and are adapted to a variety of soils and uses. Frequent cutting back gives a thicker growth of bright young twigs.

S. babylonica (Babylon Weeping Willow).—Probably the best known of the Willows; weeping habit, with long, slender, olive-green branches; often grown in cemeteries. Height 40 feet.

S. blanda (Wisconsin Weeping Willow).—Of drooping habit and harder than *Salix babylonica*. Valuable on account of its ability to resist severe cold.

S. caprea (Goat Willow).—Branches spreading and drooping, forming an umbrella-shaped head.

S. pentandra (Laurel Willow).—Ornamental tree of upright growth; bark brownish green; leaves dark, glossy green; excellent for seashore planting.

S. incana (Rosemary Willow).—Dwarf habit, feathery branches, silvery foliage; usually grafted on 5 to 6 foot stems, when it forms a dense round top; useful in formal plantings.

S. vitellina britzensis (Bronze Green Willow).—This variety differs from others in that the young growth is salmon-yellow, turning to bronzy-red in Autumn.

S. vitellina lutea (Golden Willow).—A large and venerable appearing tree, conspicuous at all seasons but particularly in Winter, on account of its yellow bark. Height 60 feet.



Salix Babylonica—Babylon Weeping Willow,



Tilia - Linden

The Lindens grow fast, forming noble trees of rounded outline, and casting a dense, cool shade. The leaves are large and cordate, the flowers light yellow, exhaling a delightful citron odor. All are among our best large-growing street and avenue trees; fine also for specimens and grouping.

T. americana (American Linden).—A stately tree, growing 60 to 80 feet tall, with large, shining cordate leaves. Particularly valuable for its beautiful white wood. Its flowers appear in July.

T. tomentosa argentea (Silver Linden).—Conspicuous among other trees because of its silver-lined leaves. These give it great brilliancy when ruffled by the wind. Handsome, vigorous, pyramidal in shape; 60 to 80 feet high. Beautiful tree for the lawn.

T. vulgaris (Common Linden).—Very fine pyramidal tree of large size, having large leaves and fragrant flowers. Very desirable.

T. platyphyllos (Big Leaf European Linden).—An exceedingly broad-leaved variety, growing into a noble tree of 60 to 80 feet high. It flowers in June, the earliest of the Lindens.

Ulmus - Elm

U. americana (American Elm).—Easily distinguished by its wide-arching top, vase-like form and pendulous branchlets. Next to the oak, this is the grandest and the most picturesque of American trees. Attains 80 to 100 feet. Dull yellow or brown in Fall.

U. campestris Wheatleyi (Wheatley Elm).—A narrow, pyramidal tree with ascending branches. Small, dark green leaves. Retains its verdure the entire Summer.

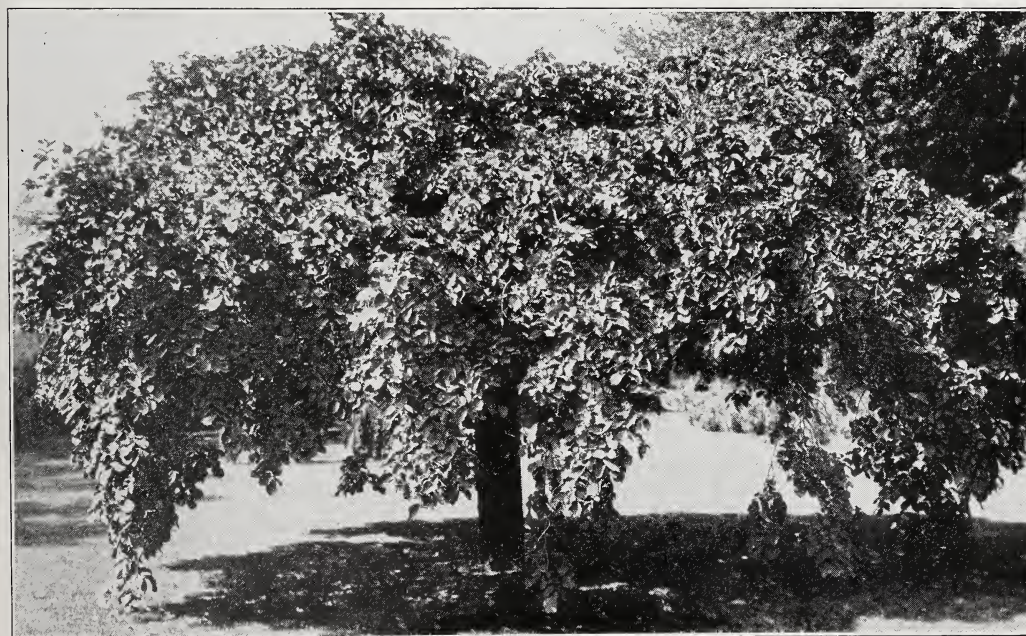
U. glabra (Scotch Elm).—Broad, round topped head, spreading branches.

U. glabra camperdowni (Camperdown Elm).—One of the finest drooping lawn trees. The branches spread horizontally in an attractive way and then gracefully turn down, forming a picturesque natural arbor.

U. racemosa (Rock Elm).—Short, spreading branches, forming an oblong round-topped head. Branchlets irregularly corky-winged after the second year.



Ulmus Americana—American Elm.



Ulmus Glabra Camperdowni—Camperdown Elm.



Ornamental Shrubs

FLOWERING shrubs and plants, and those with brilliantly colored foliage, are to landscape gardening what the finishing touches are to a picture or the decorations to a room. They help to fill out the well-rounded forms of groups of trees, and, possessing more variety of colors and foliage than the trees, they add beautiful bits of color and pleasing contrasts. Being of small size, they are especially useful in small gardens and borders, for ornamenting the foreground of groups of trees and evergreens, and in particular they serve a purpose of a setting or ornamentation close to the dwelling. A driveway or walk may be effectively hidden and broken here and there by dwarf plantings exhibiting fresh charms, surprisingly delightful to the eyes as they fall upon new views. To give a walk or drive new interest by its curves and windings, and to plant with the choicest of trees and shrubs that add half-hidden beauties of flowers, foliage and wood at every turn, is the test of any work in landscaping.

Shrubs must suit the object for which they are grown. Often a fine lawn is spoiled by having thrust in here and there trees and shrubs without relation to method, purpose or design. They are best planted in groups with due consideration of size, character of growth and effect. They afford excellent screens for undesirable objects, such as chicken yards, old buildings and fences, and the effect of a shrub border for a front or back lawn, produced by careful setting, is always a pleasing one. Beautiful color effects are obtained by selecting shrubs with foliage of contrasting colors. The silver, golden, purple and many shades of green, if carefully arranged, never fail to catch the eye and leave a pleasing effect.

Shrubs vary in size from dwarf to tall—there are scarcely two varieties which produce the same effect. With the exception of a little pruning and an occasional stirring of the soil, shrubbery practically takes care of itself.

Amelanchier - Shadblow

A. canadensis botryapium (Downy Serviceberry).—A bushy shrub flowering in May, followed by fruit of a maroon-purple in June. Very profuse bloomer. Color of flower, white.

Amorpha - False Indigo

A. fruticosa (Indigo Bush).—Grows 6 to 10 feet high and forms a large, spreading bush, with compound leaves, containing 10 to 20 bright green leaflets and slender spikes of deep violet-blue flowers in June, after the flowers of most shrubs have faded.

Aralia

A. acanthopanax pentaphyllum.—A pretty Japanese shrub of medium size and rapid growth; branches furnished with spines; leaves pale green. Blooms in June.

Aronia - Chokeberry

A. arbutifolia (Red Chokeberry).—A beautiful, densely-branched shrub bearing clusters of white flowers in May, followed by extremely ornamental red berries.



Buddleia—Oxeye Butterfly Bush.

Artemisia - Wormwood

A. vulgaris (Mugwort).—Grown and used because of its ornamental foliage. Branches purplish, leaves fragrant, white-cottony beneath, green above.

Berberis - Barberry

There is a charm about the Barberries hard to describe and no more practical and beautiful shrub can be grown. Their masses of white, yellow or orange flowers are showy in Spring, their leaves color brightly in Fall, their scarlet, blue or black berries are persistent through most of the winter. They make a dense low hedge, will stand any amount of shearing, are perfectly hardy and will grow in any sunny, well-drained position. Three varieties of the Barberry harbor the black rust on wheat. As soon as we had reliable information from good authority that this was a fact we destroyed our entire stock of *B. ilicifolia*, *B. vulgaris* and *B. purpurea* and do not now propagate those varieties.

B. Thunbergi (Japanese Barberry).—From Japan. A pretty species of dwarf habit, small foliage, changing to a beautiful coppery red in autumn. Valuable as an ornamental hedge.

HORTICULTURAL VARIETY OF BERBERIS

BOX BARBERRY—A dwarf, upright form of the popular *B. Thunbergi*. It is perfectly hardy, thriving wherever the Barberry grows. It does not carry wheat-rust. It lends itself most happily to low edgings for formal gardens when set from 4 to 6 inches apart and kept trimmed. Also makes a beautiful low hedge when set 6 to 12 inches apart. The foliage is a pleasing light green, changing in Autumn to rich reds and yellows.

Buddleia - Butterfly Bush

One of the most admired shrubs. Of quick, bushy growth. The lovely bloom spikes appear in July. Bloom radiates a delightful perfume. Freezes down in Winter but grows again rapidly each Spring, attaining a height of five feet in July.

B. magnifica (Oxeye Butterfly Bush). (*Hort. V. S. P. N.*)—This variety is the hardiest for all sections. Flower spikes ten inches in length by three in diameter. Color deep violet-rose, with a pronounced orange center.

Calycanthus

C. fertilis glaucus (Pale Sweet Shrub).—The wood is fragrant, foliage rich; flowers of rare chocolate color, having a peculiarly agreeable odor. Flowers in June and at intervals afterwards.

Caragana - Pea Shrub

C. arborescens (Siberian Pea Tree).—Makes a very handsome show in the late Spring with its compound, bright green foliage and numerous small clusters of bright yellow flowers. Perfectly hardy and valuable for either group or individual planting.

Cephalanthus - Buttonbush

C. occidentalis (Buttonbush).—A native shrub, with globular heads of white flowers in July. Height three to six feet.

Chionanthus - Fringe Tree

C. virginica (White Fringe).—A small, tree-like shrub, much admired for its curious fringe- or hair-like flowers that cover the whole surface in midsummer.

Clethra

C. alnifolia (Cinnamon Clethra).—A native shrub of low and dense growth; leaves abundant and light green; has numerous spikes of small white, fragrant flowers. Blooms abundantly in July.



Berberis Thunbergi—Japanese Barberry.



Cydonia Japonica—Japanese Flowering Quince.

Colutea

- C. arborescens** (Common Bladder).—Of quick growth in any dry, sunny situation, forming graceful clumps of delicate foliage. Its long racemes of yellow and cinnabar-red pea-shaped flowers appear in Summer, and are followed by large, showy red seed-pods.

Corylus - American Hazel Nut

- C. americana** (American Hazelnut).—The well known hazelnut.

HORTICULTURAL VARIETY OF CORYLUS

- PURPLE FILBERT** (*C. avellana atropurpurea*).—A very conspicuous shrub. Valuable in borders for contrast. Leaves purple.

Cydonia - Quince

- C. japonica** (Flowering Quince).—Very early in Spring this fine old shrub is completely covered with dazzling scarlet flowers. The leaves are deep green and glossy, the growth tall, bushy, twiggly, with stout branches armed with fierce thorns. The quince-shaped fruits are quite fragrant. It makes a beautiful flowering and defensive hedge; grows naturally three to six feet high, but bears any amount of shearing.

Cornus - Dogwood

Valuable shrubs when planted singly or in groups or masses, some distinguished by their elegantly variegated foliage, others by their bright-colored bark.

- C. alba sibirica** (Coral Dogwood).—Very conspicuous and ornamental in Winter, when the bark is blood-red.
- C. alternifolia** (Pagoda Dogwood).—Shrub or small tree to 25 feet. Flowers creamy-white, fragrant. Last of May.
- C. amomum** (Silky Dogwood).—Flowers white, fruit blue, branches red and spreading. Blooms in June.
- C. Baileyi** (Bailey Dogwood).—A very handsome shrub of upright growth, with dark red branches, blooming nearly all Summer. The Fall color of foliage and Winter color of twigs are unequalled.
- C. elegantissima variegata** (Variegated Cornelian Cherry).—One of the finest variegated shrubs; of rapid growth; the leaves are broadly margined with white, while some are entirely white. Bark bright red in Winter.
- C. alba Spaethi** (Spaeth Dogwood).—While the variegation in the variegated Cornelian Cherry is white, in this variety it is pale yellow. One of the finest variegated shrubs.
- C. flaviramea** (Golden Twig Dogwood).—Bright yellow bark in Winter, particularly effective in shrubberies planted with the Red-Branched Dogwood.
- C. mascula** (Cornelian Cherry).—A small tree, producing clusters of bright yellow flowers early in Spring, before the leaves, followed by red berries.
- C. paniculata** (Gray Dogwood).—Smooth ash-colored bark; pointed leaves, light green above, whitish beneath; flowers greenish white; fruit white.
- C. sanguinea** (Bloodtwig Dogwood).—Flowers white, fruit black, branches bright red and upright.
- C. stolonifera** (Red Osier Dogwood).—A native species, with smooth, slender branches, which are usually red in Winter.



Cornus Sibirica—Siberian Red Dogwood.



Cotoneaster

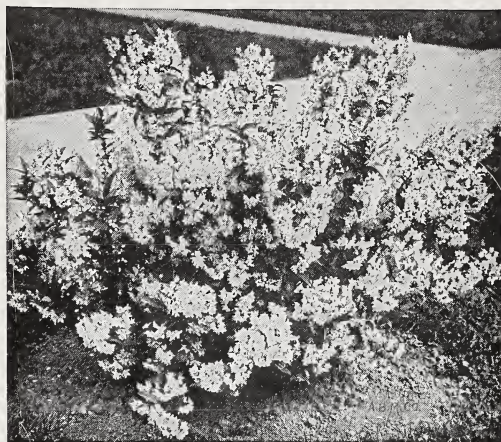
- C. acutifolia** (Peking Cotoneaster).—Shrub to 12 feet, with spreading, slender branches. Flowers May and June. Fruits black, September-October.
- C. divaricata** (Spreading Cotoneaster).—Flowers bright red. Foliage dark crimson in Autumn. Height six feet. Hardy.
- C. horizontalis** (Rock Cotoneaster).—A low shrub with almost horizontal branches. Leaves dark green, turning to dark crimson in Fall. Pinkish white flowers, fruit bright red. Attractive in rockeries or a most desirable ground cover. Blooms in June. Bright red fruits in September-October.

Desmodium

The Desmodium, or as it called by some authorities, Lespedeza, is mostly listed as a perennial, as it dies down in Winter, but is perfectly hardy. It is valuable for planting in front of shrubbery and its long, drooping racemes of purplish rose flowers are distinctly ornamental.

Desmodium tiliæfolia.—A large, deciduous shrub of the Himalayas. Valuable in landscape work.

Desmodium (Lespedeza Bicolor).—An erect, shrubby plant, native to the temperate and tropical regions of the Himalayas; three foliate leaves, axillary and terminal racemes of very small red flowers. The pods are usually about one inch long, and are clothed with minute hooked hairs. Valuable in landscape work. Blooms first season.



Deutzia Gracilis—Slender Deutzia.

Deutzia

No other shrub in the whole list will yield better returns for a minimum of care than the Deutzias. They vary greatly in height and habit, but all have dainty bell or tassel-shaped flowers borne thickly in wreaths along their branches in June. The taller sorts are useful for specimens, groups, and in the background of shrubberies; the dwarfier for borders or for planting near the house or in front of the piazza.

D. crenata rosea.—Showy rose-colored flowers, blooms in July. Vigorous, hardy. Medium height.

D. gracilis (Slender Deutzia).—A neat, dense little bush, rarely over two feet high, that blooms in May, wreathing its drooping branches with pure white flowers. Equally valuable for shrubberies and forcing.

D. gracilis rosea plena (Rose Panicle Deutzia).—Similar to the *D. gracilis*, but the flowers are double and tinged with old rose. Beautiful.

D. Lemoinei (Lemoine Deutzia).—Rarely growing over three feet high, with spreading branches; it has bright green leaves two to three inches long and white flowers grown in large clusters in early Summer.

D. scabra candidissima (Snowflake Deutzia).—The pure white double flowers in erect panicles two to four inches long are so perfect in shape that they are frequently used as cut flowers. The bush is neat and shapely, growing six to eight feet high, and is a handsome addition to any planting.

D. scabra crenata.—The beautiful white, single-flowered species, growing six to eight feet tall, with a mass of bloom in early June.

D. scabra, Pride of Rochester (Pride of Rochester Deutzia).—A showy, early and large flowering sort, that blooms in May before the others. Grows six to eight feet tall. The white flowers are large and double, tinted with pink.

D. scabra (Fuzzy Deutzia).—Flowers bell-shaped, in small bunches; foliage oval, very rough underneath; tall grower.

D. scabra Fortunei (Fortune Deutzia).—Flowers in this variety are larger than the type. White. June. Three to six feet.

D. scabra Watereri (Waterer Deutzia).—Tall grower with beautiful single pink flowers in June.



Deutzia, Pride of Rochester.



Weigela Rosea—Pink Weigela.

Diervilla - Weigela

Another valuable genus from Japan. Shrubs of erect habit, while young, but gradually spreading and drooping as they acquire age. They produce in June and July superb large trumpet-shaped flowers of all shades and colors from pure white to red. In borders and groups of trees they are very effective and for margins the variegated-leaved varieties are admirably suited, their gay-colored foliage contrasting finely with the green of other shrubs. They flower after the Lilacs in June.

D. Abel Carriere—Flowers rose-carmine, purple-carmine in bud, with yellow spot in throat.

D. amabilis (Rose Weigela).—A beautiful, distinct, pink-flowering sort of this valuable shrub.

J. candida (Snow Weigela).—Of vigorous habit, an erect grower, becoming in time a large-sized shrub; flowers pure white and produced in great profusion in June, and the plants continue to bloom through the Summer, even until Autumn. A valuable variety.

D. Conquete—Flowers very large, deep pink.

D. Desbois—One of the best. Flowers a clear, very deep rose-pink.

D. Eva Rathke—Flowers brilliant crimson; a beautiful distinct, clear shade.

D. floribunda (Crimson Weigela).—A June-flowering variety of tall growth. The flowers are small but numerous and a beautiful crimson when fully open.

D. Henderson—Flowers light crimson.

D. Mme. Lemoine—Flowers white with delicate blush, changing to pink.

D. rosea (Pink Weigela).—An elegant shrub, with fine rose-colored flowers; of erect, compact growth; blossoms in June.

D. rosea nana variegata (Dwarf Variegated Weigela).—Of dwarf habit and possessing clearly defined, silvery variegated leaves; flowers delicate rose-pink. It stands the sun well and is one of the best dwarf variegated-leaved shrubs.

D. Steltzneri (Steltzner Weigela).—Another variety of this well-known shrub with dark red flowers.

D. Van Houttei (Van Houtte Weigela).—Flowers broad and flat. Deep rosy red with orange markings.

Eleagnus

E. angustifolia (Russian Olive).—Silvery green foliage, yellow flowers and fruit, make this tall shrub desirable for borders.

E. longipes (Cherry Eleagnus).—In July the plant is covered with bright red berries of large size and edible, the flavor being pungent and agreeable. Laden with fruit the bush is highly ornamental, and the fact that the leaves remain fresh till late in the Autumn gives it additional value for garden decoration.

Euonymus

The Euonymus are all highly ornamental in Autumn, when covered with showy fruit.

E. alatus (Winged Euonymus).—Of dwarf, compact habit; wood very corky; leaves small; fruit red. Very beautiful in Autumn when foliage turns bright red.

E. americanus (Brook Euonymus).—A tall-growing shrub with larger leaves than the European, turning to scarlet in Autumn; fruit large, dark red.

E. atropurpureus (Wahoo).—Shrub or small tree to 20 feet. Flowers purple. June. Leaves have splendid Fall coloring.

E. europaeus (European Burning Bush).—Forms a tree sometimes 30 feet in height. Fruit white and rose-colored.

E. radicans variegata (Goldspot Burning Bush).—A charming shrub of dwarf and trailing habit. Hardy. Foliage beautifully variegated with silvery-white tinged red in Winter. Unsurpassed for borders.



Euonymus Alatus—Winged Euonymus.



Exochorda - Pearlshrub

E. grandiflora (Common Pearlshrub).—From North China. A fine shrub, producing large white flowers in May. Difficult to propagate and always scarce. One of the finest shrubs of its season.

Forsythia - Golden Bell

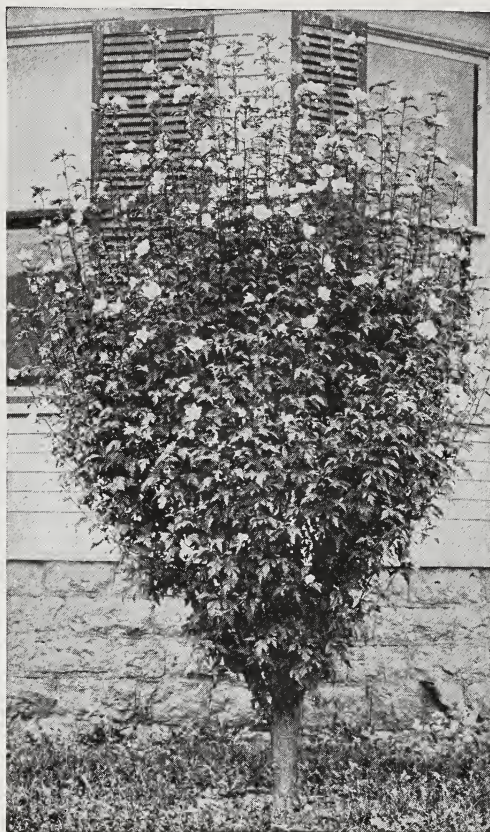
These splendid old shrubs, growing eight to 10 feet in good soil, light up the garden with glinting masses of yellow very early in Spring, before the leaves appear, and usually blooming with the Crocuses, which are frequently planted in front of and beneath them. All are of strong growth, entirely hardy, with curving branches that sometimes root at their tips; stems and leaves retain their color until late Fall.

F. intermedia (Border Forsythia).—One of the most floriferous, with slender, arching branches and dark green, lustrous leaves. It blooms so early that it is frequently covered with its bright golden flowers while the ground is covered with snow, and is one of the very first promises of the bright and beautiful Spring days to follow.

F. suspensa (Weeping Forsythia).—This variety has long, drooping branches.

F. suspensa Fortunei (Fortune Forsythia).—Handsome, erect form; very vigorous grower and very prolific bloomer. Flowers golden and continue a long time. It is a conspicuous object in shrubbery.

F. suspensa Sieboldi (Siebold Forsythia).—Shrub to eight feet, with slender, pendulous, trailing branches. Flowers golden-yellow. Blooms April-May.



Hibiscus Syriacus—Althea; Rose of Sharon.

F. viridissima (Greenstem Forsythia).—The flowers of this variety are a little deeper yellow than in other sorts and are sometimes twisted. The bush is not quite so hardy as the others of the species and it is best to give it some slight protection in Winter in northern latitudes.

Hamamelis - Witch-Hazel

H. virginiana (Common Witch-Hazel).—Valuable because of its fringe-like yellow flowers open so late in Fall—often in November—when there are few other blossoms outdoors anywhere. Grows 10 to 15 feet tall, with fine leaves that color to yellow, orange or purple in Fall and drop before the bright yellow flowers with narrow, twisted petals, appear, making them quite conspicuous among the bare branches. Likes a moist, sandy or peaty soil and partial shade.

Hibiscus - Shrub Althea

The Altheas are fine, free-growing shrubs of very easy cultivation, desirable on account of flowering in August and September when nearly all other trees and shrubs are out of bloom. The Altheas are tender in some localities.

H. syriacus (Shrub Althea).—We have it in colors of blue, pink, purple, red or white. Order color desired.

Hippophae - Buckthorn

H. rhamnoides (Common Sea Buckthorn).—Foliage grayish white; quite attractive. Succeeds particularly well near salt water.



Forsythia Suspensa Fortunei—Fortune Forsythia.

Hydrangea



Hydrangea Paniculata Grandiflora—Tree Form.

H. arborescens sterilis (Smooth Hydrangea).—This superb new Hydrangea is absolutely hardy and moreover, of easy culture, and is an exceedingly prolific bloomer; as high as 125 perfect blossoms, with an average of six inches in diameter have been found on a single plant at one time. Color is pure white, which is retained usually from four to five weeks. The flower clusters remain intact long after the leaves have fallen and frequently throughout the following Winter. Blooms first season. Should be cut back severely in Spring.

H. paniculata grandiflora (Panicled Hydrangea).—Familiar to almost everyone as the most conspicuous shrub in any collection during August and September. Its massive plumes of white flowers bend the branches with their weight, changing finally to pink and bronzy green. The shrub shows to best advantage when grown in rich beds or masses and cut back severely every Spring before growth starts. Grown in this way, it produces fewer flower-heads but much finer ones. Sometimes grown in tree form, making a strong, vigorous bush six to eight feet high. Needs close pruning and good fertilizing in order to produce choice flowers.

H. tree form (Tree Form of Panic Hydrangea).—A splendid specialty. Free flowering. Grows into fine tree shape, often seven to eight feet in height. Imported from Holland. Very fine.

Hypericum - St. John's Wort

H. aureum (Golden St. Johnswort).—A showy shrub of stiff, dense habit; foliage bluish; flowers golden yellow, from August to October. Prefers moist soil. Four feet.

H. Henryi (Henry Hypericum).—This variety is hardier than other forms of this species, of more vigorous growth and is the best of the Hypericums. Flowers yellow.



Hydrangea Arborescens Sterilis—Hills of Snow.



Ilex

I. verticillata (Common Winterberry).—A very ornamental shrub with upright branches and light green foliage; its bright scarlet berries remaining on the branches until mid-Winter.

Kerria - Corchorus

K. japonica (Kerria).—A slender, green-branched shrub, with globular yellow flowers from July to October.

K. japonica flore pleno (Double Kerria).—Of medium size; double yellow flowers.

K. argentea variegata (Silver Kerria).—A dwarf variety from Japan, with small green foliage edged with white; very slender grower. One of the prettiest dwarf shrubs.

Ligustrum - Privet

Besides being one of our best hedge plants, the different species of the Privet form interesting groups on the lawn. They are almost evergreen, and of dense, shapely habit. Their white flowers grow in pretty sprays, are fragrant, and followed by berries of different colors. Valuable planted as shrubs.

L. amurense (Amur Privet).—The Chinese variety, hardier than the others, growing eight to 12 feet high, with dark green leaves which persist almost through the Winter. Evergreen in the South. Bears erect panicles of handsome white flowers in June, followed by black berries. This is the best of all plants for hedge purposes. Hardy in any location. One of the best for shrubbery planting.

L. ibota (Ibota Privet).—A fine and hardy border shrub, of spreading habit, with curving branches and leaves of grayish green. Pure white flowers in June followed by bluish-black seeds. Considered among the hardiest of Privet varieties. Makes an excellent hedge and very ornamental shrub.

L. ovalifolium (California Privet).—A species of unusual beauty that has become the most popular of all hedge plants. Its shining leaves give it value for porch and terrace decoration when grown in standard form. Can be sheared to any desired shape.

L. Regelianum (Regel Privet).—The horizontal, sometimes drooping branches, are distinctly beautiful. Has longer and narrower leaves than other varieties. This is one of the best of Privets. Absolutely hardy and graceful. Berries remain on all Winter and are very attractive.

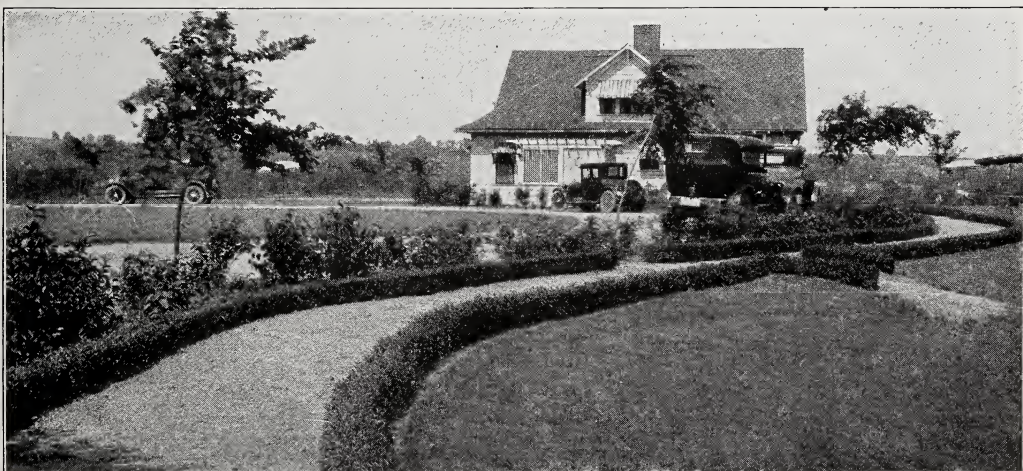


Ligustrum Amurense—Amur Privet.

L. vulgare (European Privet).—A good hedge plant with narrow, dull green foliage and quite showy flowers of white. Blooms June and July. Clusters of black berries follow the bloom which adhere to the shrub all Winter.

HORTICULTURAL VARIETY OF PRIVET

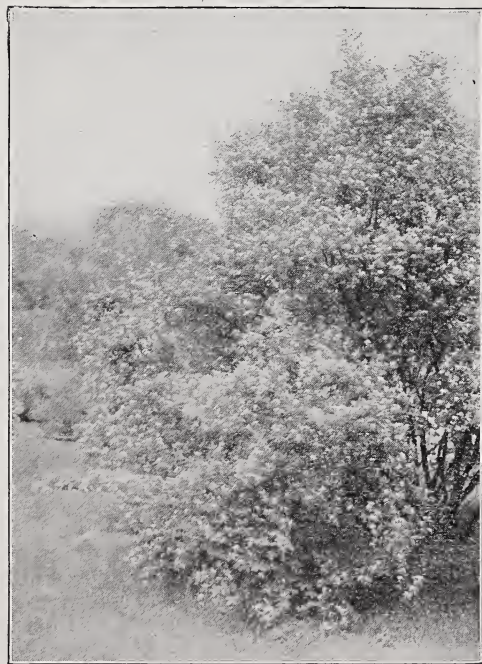
Lodense Privet (*Ligustrum nana compactum*).—Hardy, dwarf, very compact.



A Drive Bordered with the New Lodense Privet.



Pachysandra Terminalis.



Morrow Honeysuckle.



Tartarian Honeysuckle.

Lonicera - Upright Honeysuckle

The following species and varieties are of erect, shrubby habit. Valuable for their handsome flowers and showy fruit. The climbing sorts will be found under the head of Climbing Vines.

L. bella albida (White Belle Honeysuckle).—White flowers; showy red fruit in great profusion; fine.

L. chrysantha (Coralline Honeysuckle).—Shrub to 12 feet. Flowers in May-June, yellowish-white, changing to yellow. Fruits in August-September. Handsome in Autumn with its bright red fruit.

L. fragrantissima (Winter Honeysuckle).—A spreading shrub with deep green foliage and very fragrant small flowers, which appear before the leaves, foliage almost evergreen; most desirable.

L. hirsuta (Hairy Honeysuckle).—A high-climbing vine. Scentless orange-yellow flowers June, July. Hardy.

L. Morrowi (Morrow Honeysuckle).—A fine variety from Japan; valuable for its handsome red fruit. Vigorous grower, fine for heavy shrub planting.

L. Ruprechtiana (Manchurian Honeysuckle).—Particularly valuable for its yellowish white flowers in June, followed by showy red fruit in the Autumn. Foliage dark green above and grayish beneath.

L. tatarica (Tatarian Honeysuckle).—Pink flowers which contrast beautifully with the foliage. This and *grandiflora* appear to fine advantage when planted together. June.

L. tatarica alba (White Tatarian Honeysuckle).—Forms a high bush, with creamy-white, fragrant flowers. May and June.

L. tatarica rubra (Red Tatarian Honeysuckle).—Similar to the White Tartarian but with deep rose-pink flowers in early Summer.

L. tatarica grandiflora (Rosy Tatarian Honeysuckle).—A beautiful shrub, very vigorous, and producing large, bright red flowers striped with white, in June.

L. pileata (Privet Honeysuckle).—Low-spreading, and sometimes prostrate in habit. Foliage dense; leaves evergreen, or half evergreen, dark green and glossy above. Flowers yellowish-white, small, fragrant. Fruits bluish purple. Native of Central and Western China. Though this plant produces flowers that are rather insignificant, the handsome evergreen or nearly evergreen foliage and purple fruits render it a desirable shrub. It resembles a small-leaved Privet.



Maclura - Osage Orange

M. pomifera (Osage Orange).—Chiefly grown as a hedge plant. Also planted as an ornamental tree for its handsome bright green foliage and the conspicuous orange-like fruit.

Pachysandra

P. terminalis (Japanese Pachysandra).—A low evergreen, six to eight inches high. Used largely as a ground cover in evergreen and shrub plantings.

Philadelphus - Mock Orange

The *Philadelphus* is an invaluable shrub. Of vigorous habit, very hardy, with large, handsome foliage and beautiful white flowers, produced in the greatest profusion at the blossoming season. It merits a prominent place in all collections of shrubbery. Most of the varieties, except those of dwarf habit, form large-sized shrubs, 12 to 15 feet high. They can, of course, be kept smaller by pruning. The dwarf sorts are such pretty, compact plants as to be very useful where small shrubs are desired. All of the varieties flower in June, after the *Diervilla* (*Weigela*). By planting the late-flowering sorts, the season may be considerably extended.

P. coronarius (Sweet Mock Orange).—A well-known shrub, with pure white, highly scented flowers. One of the first to flower.

P. coronarius aureis (Golden Mock Orange).—A compact shrub with very brilliant yellow foliage in the Spring. Holds its color well. Good for contrast with dark-leaved shrubs. Flowers white, in May and June.

P. grandiflorus (Big Scentless Mock Orange).—Has very large flowers, slightly fragrant; branches somewhat straggling.

P. Lewisii (Lewis Mock Orange).—A vigorous grower and profuse bloomer; flowers slightly fragrant; blooms late, and valuable on that account.

P. Lemoinei (Lemoine Mock Orange).—Branches slender and arching. Flowers double in large racemes, very sweet-scented. One of the best dwarf spring-flowering shrubs. Color of bloom white, and time of bloom May.

P. Lemoinei Avalanche (Avalanche).—Very erect in growth. Leaves small and narrow. Branches slender and covered with showy white flowers in May and June.



Philadelphus Virginalis—Mock Orange.

P. nivalis (Snowbank Mock Orange).—The stamens of this variety are cream-colored, thus rendering the whole flower snowy white. Flowers inodorous.

P. virginalis (Mock Orange).—Neat habit, the finest of this family. Blooms two inches in diameter. May and June.

HORTICULTURAL VARIETIES OF PHILADELPHUS

Mont Blanc (Mock Orange).—A charming variety of dwarf habit, with very large, fragrant flowers, produced in great abundance.

Zeyher Mock Orange (*P. Zeyheri*).—Tall growing shrub, fragrant, showy white flowers. One of the best.

Physocarpus

HORTICULTURAL VARIETY OF PHYSOCARPUS

Gold Leaf Ninebark.—Tall growing. The leaves are bright yellow in Spring, gradually changing to golden brown in Fall. Flowers double, white.

Potentilla - Cinquefoil

P. fruticosa (Shrubby Cinquefoil).—A low shrub with yellow flowers in June. A handsome and distinct variety.



Philadelphus Coronarius—Sweet Mock Orange.



Prunus triloba—Double-Flowering Plum.

Prunus - Almond, Plum

- P. japonica flore pleno alba** (Double White-Flowering Almond).—Produces beautiful double white flowers in May.
- P. japonica flore pleno rubra** (Double Pink Flowering Almond).—Beautiful small shrub, bearing in May, before the leaves appear, an abundance of small, double rose-like flowers, closely set upon the twigs.
- P. cerasifera Pissardi** (Purple Leaf Plum).—The finest purple-leaved small tree or shrub. The leaves when young are lustrous crimson, changing to a dark purple, and retain this beautiful tint until they drop late in Autumn; no other purple-leaved tree or shrub retains its color like this. Flowers small, white, single, covering the tree.
- P. triloba** (Double Flowering Plum).—Native of China. Flowers double, of a delicate pink, upwards of an inch in diameter, thickly set on the long, slender branches, flowers in May.



Prunus Pissardi—Purple-Leaved Plum.

Ptelea - Hoptree

- P. trifoliata** (Common Hoptree).—A large shrub or small tree of rapid growth and robust habit. Fruit winged, and in clusters; flowers in June.

Rhodotypos - Jetbead

- R. kerrioides** (Jetbead).—From Japan. A very ornamental shrub of medium size, with handsome foliage and large, single, white flowers in the latter part of May succeeded by numerous small fruits.

Rhamnus - Buckthorn

- R. cathartica** (Common Buckthorn).—A fine, robust, hardy shrub of European origin, with dark green foliage, white flowers and small black fruit.
- R. frangula** (Glossy Buckthorn).—Dense shrub with beautiful tinted foliage in Fall and red and black berries in September.



Rhus glabra Laciniata—Cut-Leaf Sumach.

Rhus - Sumach

- R. aromatica** (Fragrant Sumach) (*R. canadensis*).—A native variety, exhaling a strong odor. Flowers greenish-white; leaves lobed.
- R. copallina** (Shining Sumach).—Beautiful shining green foliage, changing to rich crimson in Autumn. Greenish yellow flowers in August.
- R. cotinus** (Common Smoke Tree).—From the South of Europe, a much admired shrub for its curious fringe- or hair-like flowers, that cover the whole surface of the plant in mid-Summer. It grow 10 to 12 feet high and spreads so as to require considerable space.
- R. glabra** (Smooth Sumach).—Very effective in Autumn with its crimson seeds and foliage.
- R. glabra laciniata** (Cutleaf Sumach).—A very striking plant, of moderate size, with deeply cut leaves, resembling fern leaves; dark green above and glaucous below, and turning to a rich red in Autumn.

RHUS—Continued

R. typhina (Staghorn Sumach).—A large shrub or tree, brilliant foliage and scarlet fruit in Autumn.

R. typhina laciniata (Shredded Sumach).—A picturesque form with handsome leaves and deeply cut leaflets.

Rubus

R. odoratus (Flowering Raspberry).—A strong-growing plant from three to six feet high. Leaves very large. Flowers one-half inch in diameter, of rose-purple, from several to many in the cluster. Prefers rich, shady situations. It is beautiful in foliage mass, spreading rapidly and soon overtops weaker plants. Valuable for landscape work and effects.



Sambucus Nigra Aurea—Golden Elder.

Ribes - Currant

The flowering Currants are gay, beautiful shrubs in early Spring and of the easiest culture.

R. alpinum (Mountain Currant).—One of the best shrubs to plant as undergrowth and in shady places. Dense bright green foliage. Scarlet berries during Summer and Autumn.

R. aureum (Slender Golden Currant).—A native species with glabrous shining leaves and yellow flowers.

Robinia - Rose-Acacia

R. hispida (Rose-Acacia).—A pretty low shrub with showy rose-colored flowers borne in loose clusters in May and June. Good in masses and on dry banks. As it spreads from the roots like the raspberry it should not be planted where it will interfere with other shrubs.

R. hispida rosea (Hairy Locust).—Very low and shrubby, with beautiful, clear pink flowers in loose racemes. All parts of the plant, except the flowers are bristly or hairy.

Rhus Cotinus—Smoke Tree.

Sambucus - Elder

These are showy, rapid-growing, large shrubs, quite ornamental in flowers, fruit and foliage. They blossom in June. The plants should be kept in good shape by a frequent use of the pruning knife.

S. canadensis (American Elder).—Broad panicles of white flowers in June; reddish-purple berries in Autumn. A well known native shrub.

S. canadensis acutiloba (Cutleaf American Elder).—A beautiful variety with deeply and delicately cut dark green foliage. It is valuable on account of its beauty, hardiness and rapid growth and the ease with which it is transplanted.

S. nigra (European Elder).—A native of Europe, of medium size, with purplish-black berries in September.

S. nigra aurea (Golden European Elder).—A handsome variety with golden-yellow foliage. A valuable plant for enlivening shrubberies.

S. nigra laciniata (Cutleaf European Elder).—A handsome and distinct form, the leaves of which are regularly and finely dissected.

S. pubens (Scarlet Elder).—Shrub to 12 feet. Flowers yellowish-white, blooming in Spring. Berries scarlet.

S. racemosa (European Red Elder).—Panicles of white flowers in Spring, followed by bright red berries.



Sambucus Canadensis—American Elder.

Spiraea

This shrub is adapted for banking against buildings, porches or for formal effect. Needs two prunings during the Summer. Very effective.

- S. Anthony Waterer.**—A new form of better habit than the type, with larger corymbs of rosy crimson.
- S. arguta** (Garland Spirea).—A slender dwarf, three to five feet high, with branches a snowy mass of clear white flowers in early May.
- S. aurea.**—Golden-leaved Spirea.
- S. billiardi** (Billiard Spirea).—A narrow, dense shrub six feet high, with dense panicles of rich pink flowers in July and August, also in Fall.
- S. bethlehemensis** (Pink Meadow Spirea). (*S. latifolia*).—Shrub two to five feet, with bright or dark red-brown twigs. Flowers white, slightly blushed, with the stamens and disk more or less pinkish. Blooms June till August.
- S. callosa alba** (*S. japonica*).—Of dwarf compact growth, four feet high, with upright branches and bluish-green foliage; crowded with large, flat clusters of white flowers nearly all Summer.
- S. callosa rubra.**—Red-flowered.
- S. douglassi** (Douglass Spirea).—Upright in growth to five to seven feet, with reddish-brown branches and narrow, oblong leaves. Bears spikes of beautiful, deep rose-colored flowers in July and August.
- S. frobeli** (Frobel Spirea).—A taller form of Spirea than the Anthony Waterer, with broader leaves, having bright crimson flowers.
- S. fortunei**—Bears large panicles of deep rosy flowers all Summer.

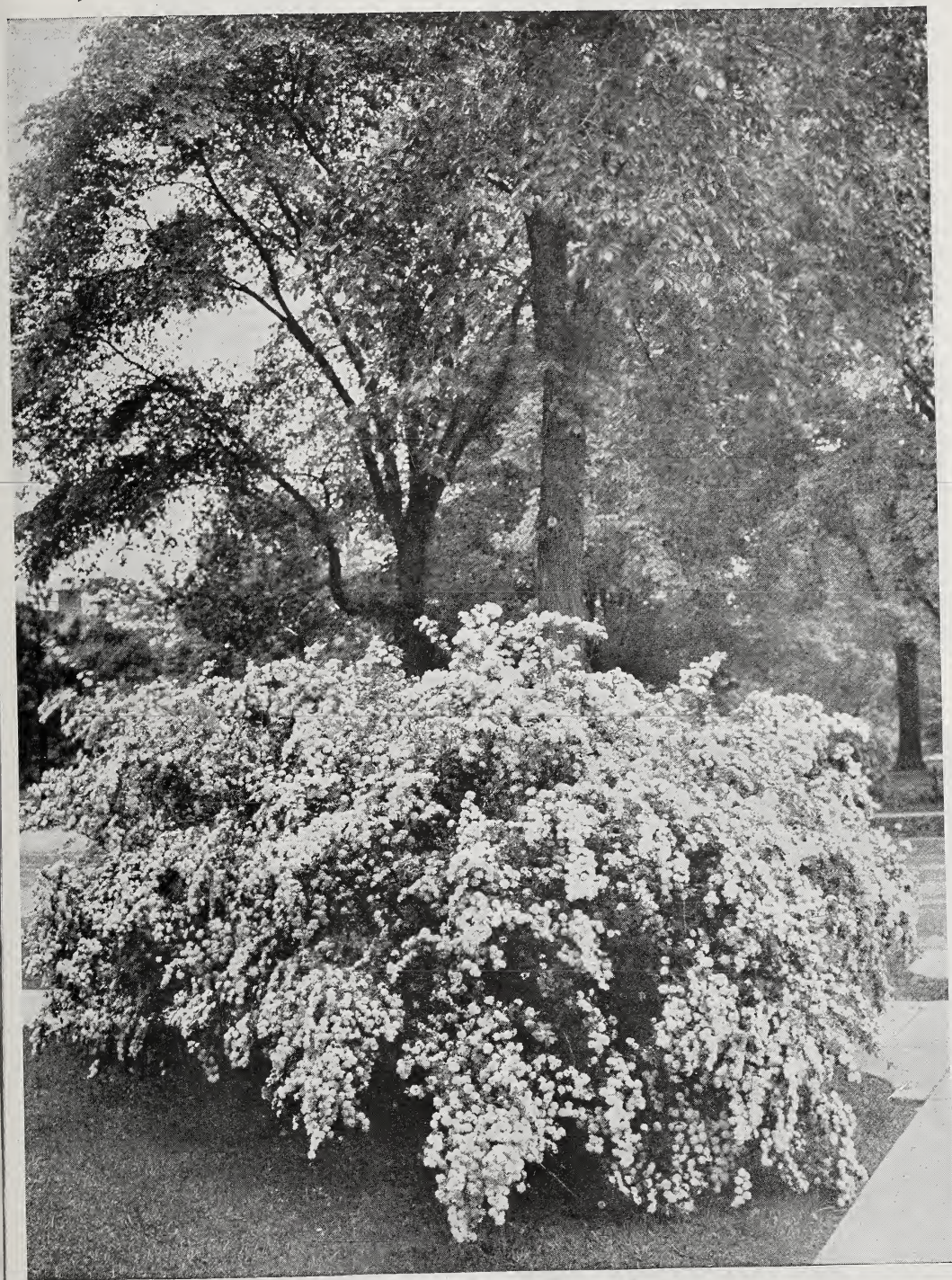


Spirea Billiardi.

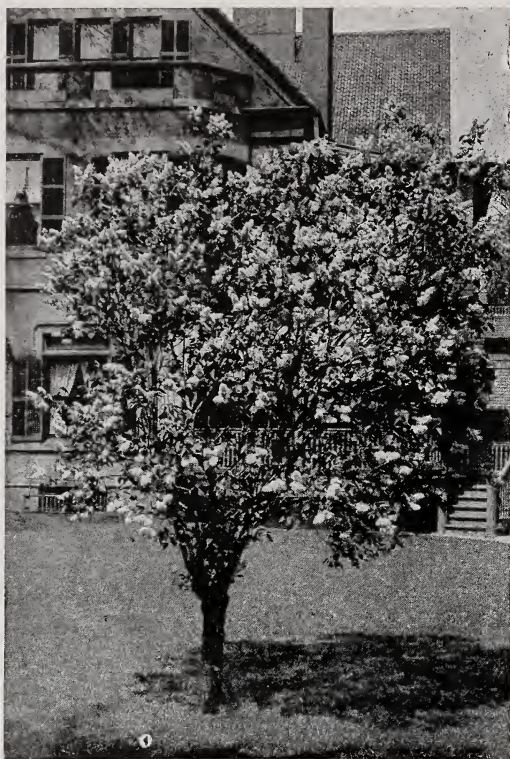


Anthony Waterer Spirea.

- S. Margarita**—Handsome, very free-flowering shrub. Flowers large, bright pink. Blooms July-August. Height five feet.
- S. physocarpus opulifolius.**—Strong-growing with white flowers along the stems. Very useful for screening purposes where immediate effect is desired; very hardy; a splendid plant for shady places.
- S. prunifolia flore pleno** (Bridal Wreath) (*S. prunifolia*).—Among the earliest of the double Spireas to bloom, very graceful and plume-like in effect, branches being covered thickly almost their whole length with small, double, white flowers and sweeping outward in gentle curves.
- S. reevesiana** (Reeves Spirea).—Tall and graceful, five to eight feet high, with dark bluish-green lance-like foliage and large, pure white double flowers in May and June.
- S. salicifolia** (Willowleaf Spirea).—This species of Spirea is upright with yellowish-brown branches bearing light pink flowers in June-July. Height five feet.
- S. sorbaria sorbifolia.**—A distinct species with large compound leaves and large heads of white flowers.
- S. thunbergi** (Thunberg Spirea).—Distinct and most attractive at all seasons, with feathery masses of pure white flowers in early Spring; in Autumn its narrow leaves change to bright red and orange. Forms a dense, feathery bush.
- S. van Houttei** (Van Houtte Spirea).—One of the most charming and beautiful of the Spireas, having pure white flowers in clusters or panicles about an inch in diameter. Astonishingly profuse in bloom and plants remarkably vigorous and hardy. A grand shrub for planting singly or in groups or as a banking against buildings. Makes one of the best shrub hedges.



Spirea Van Houttei—The Most Popular Shrub.



Syringa Japonica—Japanese Tree Lilac.



Single Lilac, Charles X.

Syringa - Lilac

Well-known beautiful shrubs that are loved and admired by all.

- S. japonica** (Japanese Tree Lilac).—A species from Japan becoming a good-sized tree. Foliage dark glossy green. Flowers creamy white, odorless, borne in great panicles. Bloom a month later than other Lilacs.
- S. josikea** (Hungarian Lilac).—A fine, distinct species of tree-like growth with dark, shining leaves. Purple flowers in June after other Lilacs have ceased flowering.
- S. lavelliensis**.—Light blue.
- S. marleyensis**.—Red.
- S. persica** (Persian Lilac).—This variety flowers in May. Color of bloom dark purple. Usual height four to six feet.
- S. persica rosea** (Pink Persian Lilac).—This is the pink flowering sort of the *S. persica* with similar habit of growth and time of flowering.
- S. rothomagensis rubra**.—An abundant bearer of dark red flowers in large panicles. June.
- S. rothomagensis rosea**.—Same as the *rubra* except that the flowers are of a rosy pink. June.
- S. villosa rosea**.—This sort is the pink flowering form of *S. villosa* with habits of growth and season of flowering similar to the above.

SINGLE-FLOWERED VARIETIES

- S. vulgaris** (Common Violet Lilac).—Bluish purple flowers or violet in color. Single. A standard variety.
- S. vulgaris alba** (Common White Lilac).—Single flowers a creamy-white.
- S. vulgaris coerulea** (Common Blue Lilac).—Single blue flowers.
- S. Aline Mocqueris**.—Dwarf, compact bush. Dark purplish-red flowers.
- S. Charles X.**—Single flowers of reddish-purple. This is a rapid-growing variety with large glossy leaves.
- S. Congo**.—Single flowers, large. Panicles long. Color dark purplish-red, distinct and superb.
- S. Ludwig Spaeth**.—Long panicles. Large individual flowers. Dark purplish-red.
- S. Marie Legraye**.—Single, white. Panicles large. One of the finest white.
- S. Rubra de Marley** (Red Marley).—Single flower of light red.
- S. Volcan**.—Large flowers of ruby red.

DOUBLE-FLOWERED VARIETIES

- S. Alphonse Lavallee**.—A double-flowering sort. Flowers bluish lilac.
- S. Charles Joly**.—Double dark purplish red flowers.
- S. Mme. Casimir Perier**.—Double, cream colored flowers, deliciously scented. Fine for cutting.
- S. Michel Buchner**.—Double flowers of pale lilac.
- S. President Grevy**.—Double flowers of dark blue.



Double Lilac, President Grevy.

Stephanandra

S. flexuosa (Cutleaf Stephanandra).—A beautiful shrub with graceful, spreading, drooping branches. Deeply cut foliage, bearing pure white flowers in June in paniced racemes. Valuable for shrubberies or rocky banks. In exposed places it kills to the ground in Winter but regains its growth quickly in the Spring.

S. japonica (Japanese Styra).—Low, spreading, symmetrical. For border or specimen planting. One of the finest flowering trees. Nodding white flowers.

Symphoricarpos

S. occidentalis (Western Snowberry).—Upright shrub with rather stiff branches. Flowers pinkish white. Blooms June-July. Fruits September. Height one to four feet. Hardy. Thrives in shade and any soil.

S. racemosus (Common Snowberry).—A well known shrub with small pink flowers and large white berries that will remain on the plant through part of the Winter. The white berries are the most attractive characteristic of the shrub.

S. vulgaris (Coralberry).—Similar to the Snowberry White, except that the berries are smaller and red in color. The habit is of slightly drooping nature and of vigorous growth. Succeeds in shady places.

Tamarix

The Tamarisks are hardy shrubs of strong but slender, upright, spreading growth. Their foliage is as light and feathery as asparagus, and they are valuable for planting near the seaside.

T. africana (African Tamarix).—Bright pink flowers in slender racemes in April and May. Shrub is 15 feet tall and is very showy with its reddish bark.

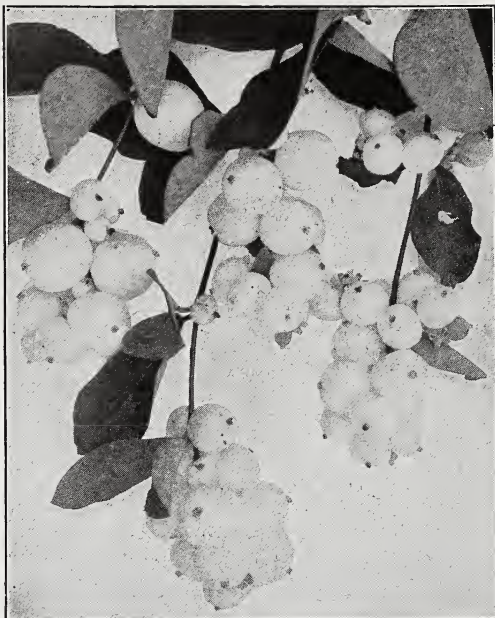
T. amurensis (Amur Tamarix).—Similar to *T. pentandra*. Purple branches. Valuable for graceful foliage. Loves dry soil.

T. gallica (French Tamarix).—Delicate pink or white flowers in slender-paniced racemes in Spring or early Summer; leaves bluish green. Grows to 15 feet high.

T. gallica indica (India Tamarix).—Pink flowers in longer, more wand-like sprays. Foliage in dull green.

T. hispida (Kashgar Tamarix).—A pink-flowered variety. Blooms in August and September. Desirable. Best for cut flowers.

T. pentandra (Five Stamen Tamarix).—Shrub or small tree with usually purple branches. Red and pink flowers in August and September.



Symphoricarpos Racemosus—Snowberry.



Viburnum Opulus Sterile—Common Snowball.



Tamarix.



Viburnum Lantana—Wayfaring Tree.

Viburnum - Arrow-wood

The Viburnums are our most useful shrubs, being hardy, of good habit, bearing handsome flowers in Summer, followed by showy fruit.

- V. acerifolium** (Mapleleaf Viburnum).—Foliage resembles the red maple. Flowers yellow-white, showy, in flat heads. Fruit almost black. Blooms May. Good for low places or under trees.
- V. americanum** (American Cranberry Bush).—Similar to *V. opulus* but habit more open and spreading. This is a handsome native shrub, very decorative in fruit, which begins to color in July, remaining on branches and keeping its color until the following Spring. The berries are not eaten by birds.
- V. carlesi** (Fragrant Viburnum).—An early-flowering Viburnum of fine habit, bearing deliciously fragrant white flowers in May, being one of the first shrubs to flower. We consider this one of the most important introductions of recent years.
- V. cassinoides** (Withe-rod).—Cymes of white flowers in June. Black berries in Autumn. Handsome foliage.
- V. dentatum** (Arrowwood).—Flowers greenish white. One of the best shrubs for massing for foliage effect.
- V. lantana** (Wayfaring Tree).—A large, robust shrub, with soft, heavy leaves and large clusters of white flowers in May, succeeded by red fruit; retains its foliage very late.
- V. lentago** (Nannyberry).—Flowers creamy-white, very fragrant; foliage a light glossy green.
- V. molle** (Kentucky Viburnum).—A robust-growing shrub, with cymes of white flowers, which appear later than those of the other Viburnums.
- V. opulus** (European Cranberry Bush).—Both ornamental and useful. Its red berries, resembling cranberries, esteemed by many, hang until destroyed by frost late in the Fall.

V. opulus nana (Dwarf Cranberry Bush).—A very dwarf, compact form of *Viburnum opulus*, seldom growing over one foot high. We predict that this shrub will soon be exceedingly popular.

V. opulus sterile (Common Snowball).—A well-known favorite shrub, of large size, with globular clusters of pure white sterile flowers the latter part of May.

V. pubescens (Downy Viburnum).—This variety has slender, upright branches. Is a handsome shrub of compact habit, three to six feet high.

V. tomentosum (Double File Viburnum).—The single form of the beautiful Japanese Snowball; flowers pure white, borne along the branches in flat cymes, in greatest profusion, early in June. Perfectly hardy, vigorous and free blooming. Very desirable.

V. tomentosum plicatum (Japanese Snowball).—From North China, of moderate growth; handsome plicated leaves, globular heads of pure white neutral flowers early in June. It surpasses the Common Snowball in several respects. Its habit is better, foliage much handsomer, flowers whiter and more delicate. One of the most valuable flowering shrubs.

WEIGELA—See Diervilla.





Climbing Vines

NOTHING can be used which will soften the harsh lines of architecture like well chosen vines.

There are many varieties of these which may be used for different purposes, that will enable the home-owner to embellish the beauty of his home, to screen barren walls, to hide fences—to drape rockeries and trellises. A home-like charm can be secured in no other way so easily, as by the proper use of vines.

If you wish specific advice on kinds to plant for any particular purpose, write us for information, which will be gladly given.



Celastrus.

Celastrus

C. scandens (American Bittersweet).—A native climber with handsome, glossy green foliage and large clusters of beautiful orange-crimson fruits, retained all Winter. Very bright in effect and its graceful sprays of berries are charming for Winter house decoration.

C. orbiculatus (Oriental Bittersweet).—Brilliant red fruit in Autumn.

Clematis

Of all the vines used either for shade or decoration, very few if any are superior to the Clematis in its many varied forms. While the large flowered kinds are not so good for shade until they attain considerable age, their wealth of bloom makes them the grandest embellishments to the porch known. Of the small-flowered varieties *paniculata* undoubtedly holds the lead either as a shade producer or for its abundance of bloom. It is a rampant grower in good soil, and the lateness of its bloom, coupled with the exquisite perfume of its flowers, makes it one of the most desirable of all vines.

C. coerulea (Common Blue Clematis).—Very fragrant. Flowers reddish violet-blue. Blooms July to September. Should be grown on northern exposure to preserve color of flowers.



Ampelopsis Engelmanni—Engelmann Creeper.

Akebia

A. quinata (Five Leaf Akebia).—A beautiful hardy Japanese vine with unique foliage and chocolate-purple flowers of delightful fragrance in large clusters. The foliage is never attacked by insects.

Ampelopsis

A. quinquefolia (Virginia Creeper).—Rich crimson in Autumn; a very rapid grower. One of the finest vines for covering walls and verandas, trunks of trees; affords shade quickly.

A. quinquefolia Engelmanni (Engelmann Creeper).—A splendid climber, grows six to 10 feet in a season. This variety has become very popular on account of its ability to cling to walls, etc., without wire trellis.

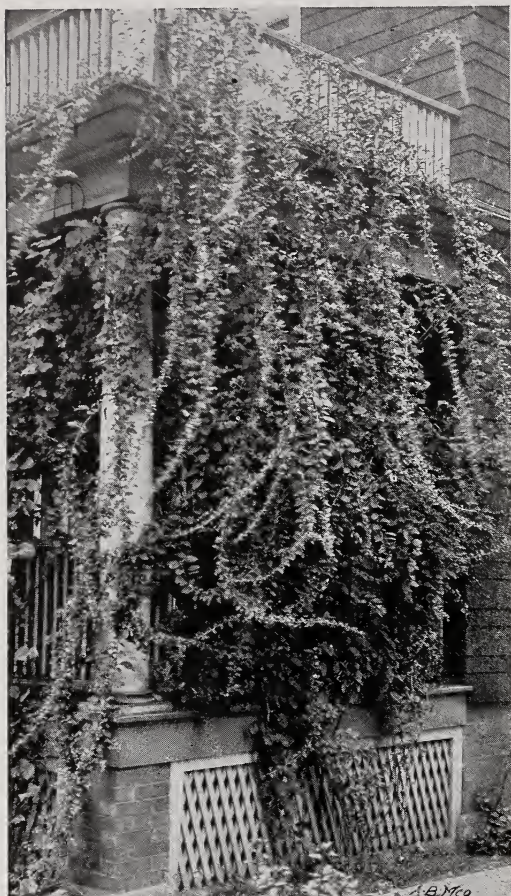
A. tricuspidata (Japanese Creeper).—A beautiful hardy Japanese species. One of the finest climbers for covering walls, as it clings firmly to the smoothest surface, covering it evenly with overlapping leaves which form a perfect mass of foliage. The color is a fresh deep green in Summer, changing to bright shades of crimson and yellow in Autumn. When once established it is quite hardy. Give some protection the first year.

Aristolochia

A. siphon (Dutchman's Pipe).—A magnificent hardy vine of rapid growth, with very large heart-shaped leaves and brownish flowers, resembling in shape a miniature pipe. Splendid for archways or verandas, as it is a very rapid grower and forms a dense shade.



Aristolochia—Dutchman's Pipe.



Matrimony Vine.

CLEMATIS—CONTINUED.

- C. coccinea** (Scarlet Clematis). (*C. texensis* S. P. N.).—Very handsome, bearing small, thick, bell-shaped flowers of bright coral-red in profusion from June until frost.
- C. Henryi** (Winter Clematis).—Very large, fine form; free grower and bloomer; creamy white.
- C. Jackmani** (Jackman Clematis).—Large, intense violet-purple; remarkable for its velvety richness; free in growth and an abundant and successive bloomer.
- C. Madame Edouard Andre**.—Has been called the *Crimson Jackmani*. The plant is a strong, vigorous grower and very free in bloom. Color, a distinct crimson-red. Entirely distinct from all other varieties.
- C. paniculata** (Sweet Autumn Clematis).—A Japanese plant possessing unusually attractive merit. A vine of very rapid growth, quickly covering trellises and arbors with handsome, clean white flowers borne in immense sheets and of a most glorious fragrance. The flowers appear in September at a season when very few other vines are in bloom.
- C. Ramona**.—Large flowers of deep sky blue.

Euonymus

- E. radicans** (Winter Creeper).—Trailing vine, small glossy foliage. Fine for buildings and as a ground cover. Clings to rocks and walls.

E. radicans vegetus (Big Leaf Winter Creeper).—This variety has beautiful glossy green leaves that are broader than other varieties. The most valuable and evergreen.

Hedera

H. helix (English Ivy).—The well known English Ivy, still the most beautiful covering that can be given to any rough wall or surface. Leaves of rich green. Should be planted on the eastern or northern side of buildings.

Lonicera - Honeysuckle

- L. japonica Halleana** (Hall Japanese Honeysuckle).—A strong, vigorous, almost evergreen sort with pure white flowers, changing to yellow.
- L. sempervirens** (Trumpet Honeysuckle).—A strong, rapid grower and produces scarlet inodorous flowers.
- L. periclymenum belgica** (Dutch Woodbine).—Foliage light green. Flowers showy and fragrant. Good climber. Bloom red-yellow in June and September.

Lycium

- L. halimifolium** (Matrimony Vine).—Sometimes trained as a shrub. Purple flowers and showy fruited. Extra vigorous in growth.

Tecoma - Trumpet Vine

- T. bignonia radicans**.—A splendid, hardy, climbing plant, with large, trumpet-shaped scarlet flowers in August.

Vinca - Myrtle

- V. minor** (Common Periwinkle).—A familiar evergreen creeper, bearing blue flowers in early Spring.

Vitis Aestivalis

- V. aestivalis** (Summer Grape).—A strong, tall-climbing vine of the native or wild grape. A marked type, readily distinguished from other species by the reddish fuzz on the under side of the leaves.

Wisteria

- W. sinensis alba** (White Chinese Wisteria).—Flowers on this variety are pure white and very beautiful.
- W. frutescens magnifica** (American Wisteria).—Strong climber. Flowers lilac-purple borne in racemes from four to six inches long.



Clematis paniculata.



The Rose, Queen of Our Gardens

ARE you a lover of Roses? If you are, why don't you grow them? It isn't so difficult as you may think. There is a Rose for every place, and there should be a dozen or more in every home garden. You can and should have your own supply of deliciously fragrant and beautiful Roses throughout the season. There isn't any question as to the place of honor among flowers held by the Rose. No other flower compares with it in beauty of form, brilliancy of color, or sweetness of perfume. They were grown during the very dawn of history and were then considered the "Queen of Flowers," just as they are today The Queen of our Gardens, because of their beauty, character and distinctiveness.

Planting and Pruning

Roses should be set in the ground at least three inches deeper than they originally grew. In planting, all broken roots should be removed and the top cut back to three or four buds.

Bush Roses should be planted 2½ feet apart; Hybrid Teas 2 feet apart; Baby Ramblers 12 inches; Climbers on trellis or porch, 4 feet apart; Climbers on fences 10 or 15 feet apart.

They should be pruned in dormant season, preferably in the early Spring. The severity of the preceding Winter governs the amount of pruning, especially the Teas. Hybrid Teas are sometimes frozen to the ground unless Winter protection is given, and if so it is necessary to remove practically all of the top.

Hybrid Perpetuals and other hardy Roses may be pruned when the sap begins to flow. Ramblers should be pruned just after the flowering season. For full directions on Planting, Pruning and Growing of Roses refer to Greening's Book of Horticulture, price 50 cents by mail, postpaid.

ROSA RUGOSA ROSE AND ITS HYBRIDS—This class of Roses is invaluable for landscape work, flowering almost continually, followed by red berries which are almost as ornamental as the Roses themselves. With a glossy green foliage not bothered by insects or disease, they are valuable in all landscape work and should be used more often for borders and especially in landscape groupings.

Hybrid Perpetual Roses

As the name implies, the Hybrid Perpetual Roses are the result of hybridizing. As a group they are the largest, best known and of the easiest culture. It is very important in planting Roses to set them deep. After planting the top should be cut off within three or four inches of the ground. Each year, in the early Spring, they should be cut back to within six or eight inches of the ground. Set sufficiently deep, they do not Winter-kill. The list given comprises the best varieties. Those marked * are the most persistent bloomers.

Alfred Colomb—Brilliant carmine-crimson, very large, full and of fine globular form. Very fragrant.



American Beauty Rose.



Frau Karl Druschki.

General Jacqueminot—Everybody who loves Roses places this sort high in the list of extra desirable kinds. Of bright crimson and sweet fragrance, it is assured a place in every worth-while collection.

George Dickson—A very dark crimson, delightfully fragrant, finely formed Rose, borne on long stems. Subject to mildew.

***Hugh Dickson**—This Rose is a free and constant bloomer, bearing its beautiful crimson and scarlet flowers on long stems. Of a sweet and gentle fragrance all its own.

Magna Charta—A rosy pink, full rounded globular Rose of marked fragrance. Profuse bloomer. Valuable for cutting. Used extensively by florists for cut flowers.

Margaret Dickson—An actual prize winner is this white sort with rosy flesh-colored center. If only half a dozen Roses are bought, this variety should be included.



Paul Neyron.

American Beauty—More widely known than any other Rose. Color deep pink to carmine-cerise. Delightfully fragrant. Valuable for cutting.

Black Prince—A very dark crimson Rose of distinctive beauty.

Earl of Dufferin—A rich, velvety crimson, shaded with dark maroon. Beautifully shaped buds borne on long, graceful stems. Very full and double. Free bloomer. Delightfully fragrant. One of the best dark reds.

Eugene Fuest—A velvety crimson sort that has no superior. This Rose should be included in every collection, no matter how limited the selection.

Fisher Holmes—An exceedingly sweet-scented Rose of bright velvety crimson or scarlet. Of more than usual beauty in both bud and flower. Considered one of the choicest.

***Frau Karl Druschki**—The finest of the white Hybrid Perpetuals. Known by some as the Snow Queen, its billowy white blossoms prove that name well taken. Very fragrant. It never disappoints.

George Arends—This is the pink form of Frau Karl Druschki. Of good, vigorous growth. Flowers bright pink, flowering singly on the point of each shoot.



General Jacqueminot.

Marshall P. Wilder—Bright scarlet-crimson in color, flowers full, round and extra large. Very fragrant. Desirable in any collection.

***Mrs. John Laing**—Softest and sweetest pink in this Rose. Very fragrant, too, and the blooms, large and double, borne on long stems. Free bloomer.

***Paul Neyron**—The largest flowered Rose, blooming freely, of a clear pink shading to rose. Fragrant, beautiful and massive. Considered one of the six best Roses for outdoor planting.

Prince Camille de Rohan—One of the darkest Roses, blood-red and maroon. Fragrant and wholly delightful. A favorite in all collections.

Ulrich Brunner—Of a lively, pleasing, light, distinctive red all its own. Flowers borne on long stems. Very fragrant, full and graceful. One of the most popular.



Hybrid Tea Roses

The Hybrid Teas rank next in importance to the Hybrid Perpetuals as a class or group and are the result of crossing the Hybrid Perpetuals with the Tea Roses. The Hybrid Teas are the freest and most continuous flowering of all the Roses. They are valued because of their delightful fragrance and constant blooming. While they are comparatively tender, they can be safely wintered if covered carefully as per the instructions given on care of Roses in this book.

Betty—A coppery rose, overspread with golden yellow. Perfume as pleasing as its colors. Both bud and flower beautiful. A constant bloomer.

Caroline Testout—A satiny rose in color, of sweet perfume and of marvelous beauty. Very popular.

Chateau de Clos Vougeat—An ideal Rose of dazzling color, being a rich scarlet, shaded fiery red, changing to dark, velvety crimson as the flowers expand; as dark but richer in color than the popular Hybrid Perpetual Prince Camille de Rohan. Continuous bloomer.



Gruss an Teplitz.

Columbia—A beautiful true pink, deepening as it matures to a warm glowing tone which endures. One of the very finest of all Roses.

Dean Hole—Color silvery carmine shading to salmon. Fragrance delicate and pleasing. Flowers large, full and of perfect form. Beautiful in bud and valuable for cutting.

Duchess of Wellington—Best of yellow Roses. Fragrant. Prolific. Indispensable.

Edward Mawley—Crimson, of delightful fragrance. Good in early season. Liberal bloomer.

Francis Scott Key—A big crimson Rose, especially good. Autumn. Hardy and healthy.

Etoile de France—Of clear red to velvety crimson. Flowers borne on long stems. One of the most charming of the red Roses.

General McArthur—A brilliant, glowing crimson-scarlet. Very sweet scented.

Golden Emblem—A beautiful dependable clear yellow Rose, showing lovely buds, which sometimes have flames of light crimson on outer petals. Flowers on upright stems well above glossy green foliage. It is the finest yellow rose in our entire list. A most desirable yellow and destined to become a great favorite.



Francis Scott Key.

Gruss an Teplitz—Of intense and dazzling crimson-scarlet that attracts attention in any garden. Fragrance delicious and lasting—both odor and color appeal to all.

Hadley—A rich red shading to velvety purple. Double. Fragrant. Desirable.

Hosier Beauty—Dusky red. Cuts well, retains fragrance.

J. B. Clark—A great, massive burst of deep scarlet, shading to blackish crimson and maroon. Flowers, too, are borne on long stems, making it invaluable for cutting.

Jonkheer J. L. Mock—This Rose won the grand prize at the International Rose Show held in Paris in 1911. Of lovely imperial pink, the flowers are large, produced freely, and are highly perfumed.

Kaiserin Augusta Victoria—In color, a pale and lovely primrose. Especially desirable for cutting by reason of long stems, beauty of bud and flower. Considered by many to be the greatest creamy-white Hybrid Tea.



Kaiserin Augusta Victoria.



Lady Hillingdon.

Lady Ashtown—Tender rose shading to yellow at base of petals, with silvery pink reflex.

Lady Hillingdon—The color of this famous Rose is beyond description. It is apricot-yellow shaded to orange on the outer edge of the petals, becoming deeper and more intense toward the center of the bloom. Buds produced on long stems well above the foliage, producing a slender and graceful effect. A very valuable Rose.

La France Rose—Color silvery rose; globular shape, large and full. Most fragrant.



Madame Butterfly.

Killarney Pink—Bloom of flesh-color suffused with pale pink in a delightful blend. Very fragrant and blooms grow naturally on long stems, making it valuable for cutting. This is easily one of the best half-dozen Roses.

Killarney White—Similar to Killarney Pink, but the color of flowers is white.

La Detroit—A most handsome and dainty Rose, with a fragrance like Bon Silene, and color of shell-pink, shading to a soft rose; outer petals of creamy color.

Lady Alice Stanley—Deep coral-rose on the outside of the broad petals, pale flesh on the inside, making a fine color combination for the large, fragrant, well-shaped buds, which develop into splendid open blooms, profusely borne on an unusually vigorous bush and persisting during the whole season. One of the very best Roses.



Los Angeles.

Laurent Carle—Produces large, deliciously scented, brilliant carmine flowers throughout the season, nearly as good in hot, dry weather as under more favorable weather conditions. Very hardy. Extra fine.

Los Angeles—Never in the history of the Rose world has a new Rose created such a sensation as the Los Angeles. It is absolutely the finest all-round Rose ever introduced and must be seen to be appreciated. The stems are as long as the American Beauty, the flowers are as large as the Paul Neyron, its freedom of bloom and continuance in flower are remarkable, and its color "a flame-pink, toned with coral and shaded with translucent gold" at the base of the petals. If selection be limited to one Rose, this is the one to select.

Mad. Ravary—A golden-yellow favorite variety, beautiful in both bud and flower at all stages. Fragrant and delightful.

Maman Cochet—Color of bloom pink with rosy crimson, which changes to silvery rose. Pointed buds. Fragrant. Desirable.



Sunburst.

Miss Lolita Armour—This beautiful Rose won the Bagatelle (Paris) prize in 1921, which is the highest honor that can be given a Rose. Its fragrant blooms develop from well-shaped buds, chrome-yellow at base, shading to orange and copper hues on the reverse of the petals, and with much of the characteristic copper and shrimp-pink tints in its makeup.

Mrs. Aaron Ward—Deeply cupped buds which when open produce a delightfully attractive deep golden orange flower, shading outward to creamy yellow.

Mme. Butterfly—Color a tender pink and gold. One of the best for cutting. Very fragrant. A general favorite.

Mrs. W. C. Miller—An exceptionally hardy Rose of rose and pink. Blooms freely. Sturdy and dependable.

My Maryland—A bright but tender salmon-pink; delightfully fragrant. Flowers double and of perfect form. Profuse bloomer.

Ophelia—One of the most beautiful of the newer introductions. Excellent for cutting, its perfect flowers of distinct form emitting an exquisite fragrance. Color salmon-flesh shaded with rose.

Radiance—This Rose blends in colors of carmine-rose with shades of opal and copper. Wholly delightful.

Red Radiance—Wonderful bloomer of cerise-red. Good for cutting. Fragrant.

Rhea Reid—A beautiful Rose of scarlet-crimson that never disappoints either in bud or full bloom.

Richmond—Free bloomer. Immense, fragrant scarlet-crimson flowers. Valuable for cutting.

Souvenir de Claudius Pernet—A clear sunflower yellow, which doesn't fade. Buds should be cut early to retain their beauty of form.

Sunburst—A magnificent giant yellow forcing Rose, also well adapted for outdoor growing, being a vigorous and healthy Rose. Buds long and pointed, borne single on long, stout stems, opening full and double. An excellent cut flower variety, having good keeping qualities. A very vigorous grower, reddish bronze foliage. The color is a superb orange-copper or golden-orange, with a deep orange center. This Rose creates a sensation wherever grown.

White Maman Cochet—One of the daintiest white Roses. Fragrant. Claimed by many as the best white Rose for garden culture.

Miscellaneous Roses

Harrison's Yellow—Flowers semi-double, of medium size. Color bright golden-yellow. Fragrant. Hardy and desirable.

Juliet—A most distinct and attractive Rose with large flowers. The outside of petals is old gold, the interior rich, rosy red, changing to deep rose as the flowers expand; of delicious fragrance.

Mad. Edouard Herriot—Flowers medium sized, semi double, in a glorious commingling of terra-cotta, bronze, geranium-red and dull copper; buds fine, long, pointed, of coral-red and yellow. Foliage bronze-green.

Persian Yellow—Deep golden yellow. Fragrant. Flowers large, nearly double, exquisite form.

Soleil d'Or—Especially valuable because of its rare color—gold and orange-yellow, varying to ruddy gold, suffused with na-turtium-red. Commonly known as "Sun of Gold."

Willowmere—Flowers a rich shrimp pink shaded yellow at center and toning to a cream pink at base of petals. The buds are beautiful, the flowers large and the foliage a lustrous green.

Moss Roses

Blanche Moreau—A lovely large pure white Rose.

Crested Moss—As its name implies, it is crested with rich green shadowy moss. Color pale rose. The blooms are large, full, and of exquisite form. Beautiful in bud and in full bloom.

Henri Martin—Color deep carmine, shaded with bright crimson. The buds are especially well mossed, and while not so well known as some of the other varieties, is a favorite when once seen.

Salet—A rosy pink. Both bud and blossom are fully crested with moss. Considered one of the most desirable of the Moss Roses.



Red Radiance.

Hardy Climbing Roses

C LIMBING Roses are useful for covering arbors, walls, etc. They succeed best in deep, rich soils. They should be pruned severely immediately after flowering to induce strong growth and to guard against mildew, to which they are subject, particularly if exposed to the hot sun.

American Pillar—A single-flowered type of great beauty. Flowers three to four inches across, of a lovely pink with a clear white eye of yellow stamens.

Aviateur Bleriot—A new yellow Rambler whose foliage is insect and disease proof. Bears large clusters of medium sized full double flowers of saffron yellow deepening to an almost golden yellow at center.

Climbing American Beauty—One of the best climbers. Color, a pleasing rose pink, of splendid form and good substance.

Crimson Rambler—This was the first of the ramblers introduced from Japan in 1894. Too well known to need a description; everyone is familiar with its large clusters of crimson flowers.

Dr. W. Van Fleet—This Rose, because of its dainty color and exquisitely shaped buds and flowers, appeals to all. The long pointed buds are of flesh pink borne on stems 12 to 18 inches long. Splendid for cutting.

Dorothy Perkins—A clear cherry-pink of sweet fragrance. Always gives satisfaction because it is a rapid grower and always healthy. One of the very best climbers.

Excelsa—Color blood-red, the tips of petals tinged with scarlet. Flowers double and foliage a dark glossy green. Commonly called "Red Dorothy Perkins."

Flower of Fairfield—Known to many as the everblooming Crimson Rambler. It carries its bloom from Spring even into November. Very desirable.



Paul's Scarlet Climber.

Mary Wallace—A new Rose of the Pillar type introduced by Dr. Van Fleet. Hardy. Prolific bloomer; semi-double rose-pink flowers, petals of which are salmon at the base. Best Rose of this type so far introduced.

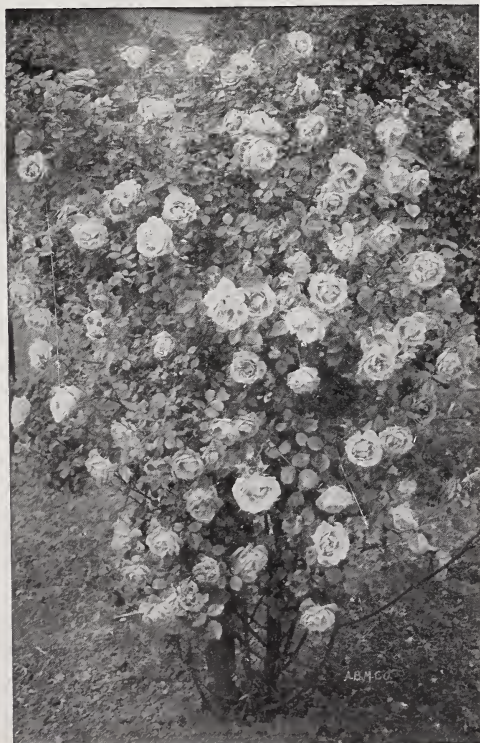
Silver Moon—Different from all other Roses, with beautiful semi-double flowers four and one-half inches in diameter. Pure white in color, beautifully cupped; the large bunch of yellow stamens in the center adds to its attractiveness.

Tausendschoen—Distinctly different from any other Rose and a very charming one, too. Color, soft pink, changing to rosy carmine. Flowers profusely. Hardy. One of the best and merits its name of "Thousand Beauties."

White Dorothy Perkins—Similar to the pink form in every respect. Very fine.

Paul's Scarlet Climber

This new hardy climber was originated in England. It is not a Rambler, but is an entirely distinct hybrid and without question the most important addition to the list of Climbing Roses in many years. Incomparable in brilliancy of color, which is a vivid scarlet maintained without burning or bleaching until the petals drop. Flowers are medium size, semi-double; very freely produced in clusters of from three to six each on large branched canes, the plants being literally covered with flowers from top to bottom. It is strong, perfectly hardy, and has been awarded the Gold Medal by the National Rose Society of England; also the much coveted Gold Medal of the Bagatelle Gardens in Paris, France. Most highly commended by the English horticultural press and the American Rose Society.



Dr. W. Van Fleet.



Bed of White Baby Ramblers.

Polyantha Roses (Fairy or Baby Rambler)

NO CLASS of Roses is more popular than this. They are hardy, showy and compact growers. Hold their color well and continue to bloom through a long season. Dwarf in habit (18 to 24 inches).



Baby Tausendschoen.

Baby Rambler—When in bloom the bush presents the appearance of an assembled bouquet except for a glimpse here and there of the deep glossy green leaves. Flowers red and slightly fragrant. For a rose-hedge it has no superior among all Roses.

Baby Dorothy—In color similar to the climbing Dorothy Perkins and in every respect equal to the Baby Rambler above except the color of the bloom, which is as beautiful a pink as can be imagined.

Baby Tausendschoen—Identical in color to the popular climbing Tausendschoen, a soft tender shade of pink, blooming throughout the season.

Erna Teschendorf—A sport from the Crimson Rambler, as bright as Gruss an Teplitz, which has been described as the reddest of all Roses.

George Elger—A coppery golden yellow in bud but a pale yellow when fully opened.

F. J. Grootendorst—See page 96.

Jessie—Of a bright cherry crimson which does not fade. Blooms constantly until killed by frost.

Mad. Cutbush—Clear flesh pink with shading of rose. One of the best pink ramblers.

Orleans—Geranium red with distinct center of pure white. Free bloomer; a great favorite.

Pink Soupert—The bloom is large, profuse, fragrant and handsome. Color, a cheerful, bright rose-color. Persistent bloomer and valued as a foreground for border varieties.

Yellow Soupert—Blossoms of chrome-yellow, appearing freely in clusters. They are large and double and especially dainty in bud. A constant bloomer from early Summer until freezing weather.

Yvonne Rabier—The best white Baby Rambler, with full double flowers produced in great profusion.



Best of All Baby Ramblers

F. J. Grootendorst

Indispensable in Every Garden

Hardy. Deep Red Color. Blooms From June Till Frost.

THIS Rose is the result of crossing a briar Rose (*Rosa rugosa*) with the dwarf Rambler, (Polyantha). It is needless to say that this union of stock produces an extremely hardy Rose. It grows more vigorously than the Polyanthas, showing its *Rosa rugosa* blood in this as well as in the foliage, which is insect and disease proof. The flowers are borne in clusters—not many in the cluster—but each individual Rose stands out full, clean and distinctive, and the color is a decided deep red. The size of bloom, too, is double that of the ordinary Polyantha. In bloom constantly from early Summer until Winter. In all, a remarkable addition to the Rose family and one which will demand a place in every garden.



Paul's Scarlet Climber

PAUL'S SCARLET CLIMBER is a new Rose that is far superior to any that preceded it in its class. It is not a Rambler, but is an entirely distinct hybrid and without question the most important addition in many years to the list of Climbing Roses. Incomparable in brilliancy of color, which is a vivid scarlet maintained without turning or bleaching until the petals drop.

See Page 94 for Full Description of This Wonderful Rose.



Greening's Orchid Iris Collection

IT IS difficult to decide which one among the many beautiful flowers is our favorite or best. But you will agree that among those most desirable, the Iris ranks high, and that its delicate iridescence appeals to all. To us, it is more wonderful than the Orchid and Nature has given us this hardy substitute which may be grown anywhere, by anyone, with the minimum of care.

See Pages 104 and 105 for Cultural Directions and Descriptions.



Rugosa Roses and their Hybrids

THIS type is perfectly hardy and is much used in landscape work. Growth upright. Height about six feet. Very sturdy and very thorny. The leaves are a dark, lustrous green. These Roses are not annoyed by insect pests. The flowers are followed by brilliant red fruit, which gives this type a peculiar charm in late Fall and early Winter. Valuable for hedges and borders and especially for landscape grouping.

R. rosa rugosa—Valuable for landscape work. We can furnish this variety in colors of Alba, white; Rosea, pink; Rubra, red.

Blanc Double de Coubert (Hybrid).—A splendid double pure white Rose of this class. One of the best. Foliage deep green; not subject to blight.

Conrad F. Meyer (Hybrid).—A Japanese variety of a lovely silvery rose, full double with a fragrance that is delicious. A Rose of many virtues and surpassing beauty. Blooms freely all season.

Hansa (Hybrid).—An attractive double, reddish-violet Rose of the Rugosa sort.

New Century (Hybrid).—A very beautiful flesh pink with light red center.

Roseale de l'Hay (Hybrid).—A new Hybrid Rugosa of which we cannot speak too highly. A good grower; flowers very double, of a carmine-cherry-red. Very fragrant.

Sir Thomas Lipton (Hybrid).—The double pure white flowers are borne on long stems in early Summer. Vigorous grower.

Rosa Blanda (Meadow Rose).—Pink bloom. Erect habit. Red bark. Blooms in May and June.

Rosa Carolina (Dogbrier).—Hardy, shrubby. Pink flowers.



Rosa setigera.

Rosa humilis (Pasture Rose).—Large pink flowers. Semi-spreading habit. Red bark. Blooms June and July.

Rosa lucida (Virginia Rose).—The familiar wild rose. Flowers pink. June. Five feet high.

Rosa multiflora (Japanese Rose).—White flowers in large clusters.

Rosa rubiginosa (Sweet Brier).—Flowers single, pink. Fragrant. Valuable in landscape work. Height six feet.

Rosa setigera (Prairie Rose).—Long slender recurving branches. Height six feet. Blooms in profusion. Valuable in landscape work for massed plantings.

Rosa wichuraiana (Memorial Rose).—The best Rose for covering unsightly objects. Its shining foliage and pure white, fragrant blossoms make it desirable for banks and rockeries.

Rosa rubifolia (Red Leaf Rose).—Leaves blue-green tinged with purplish-red. Fruit scarlet. Attractive in early Winter. Hardy. Valuable for color effect in landscape work.

Special Rose

"The Golden Rose of China"

Rosa Hugonis (Hugonis Rose).—This Rose, often called "The Golden Rose of China," will bloom three weeks earlier than most other Roses and is a spectacle in itself with every branch of last year's growth lined on both sides to the very tip with yellow single flowers like dainty yellow hollyhocks. Its long arching sprays make exquisite indoor decorations in early Spring when other flowers are scarce. It is fine for shrubbery planting and makes a symmetrical bush about six feet in height and the same in diameter when fully matured. The beautiful reddish maroon new growth springing from the roots to provide new bloom for next year's growth is an added and unusual attraction. Hardy.



Rugosa Rose.



Hardy Perennials

THE flowers of the perennial family are those that made glad the hearts of our grandmothers, and from our lists we selected the following as being the most satisfactory. We advise early Spring planting in very rich soil deeply worked. For border we use plants of the same variety and color as much as possible. They are most effective if planted in groups along the border or mass plantings.

Perennials die to the ground in Winter and grow up again early in the Spring. Further information if desired on the subject of herbaceous plants will be cheerfully given if you write our Department of Information.



Achillea Ptarmica.

Achillea - Yarrow

A. Boule de Neige (*H. V. of A. ptarmica*).—This variety is an improvement on *A. ptarmica*, the flowers, although not so large, are of more perfect form with fuller centers. White. Blooms all Summer. Height 1½ to 2 feet.

A. filipendulina (Fernleaf Yarrow).—Finely cut foliage and brilliant yellow heads of flowers lasting in full beauty all Summer. Four to five feet.

A. ptarmica (Sneezewort).—Pure white flowers. Blooms all Summer in greatest profusion. Strong, erect stems two feet high. Valuable for cutting.

Aconitum - Monkshood

A. napellus (Aconite).—Large dark blue flower. August to September. Four feet high. Valuable under trees or in shady positions.

Alyssum

A. saxatile (Goldtuft).—Indispensable for rockeries or border, growing one foot high. Blooms in May. Broad, flat heads of bright yellow flowers.



Anchusa - Bugloss

The rich blue tones of Anchusa make it desirable for its season. Easy culture. Effective.

A. italica (Italian Bugloss).—An attractive plant with blue trumpet-shaped flowers in panicles. Continuous bloomer if not allowed to go to seed. Large, rough, glossy foliage. Three to four feet. Late May to mid-July.

A. Dropmore (*H. V. of A. italica*) (Dropmore Bugloss).—Color a rich gentian blue. Blooms May and June. Height three to five feet. Much branched.

Anemone japonica - Japanese Windflower

Among the most important of hardy plants. Begin blooming in August and continue in full flower until cut down by hard frost. Fine for cutting. Height two to three feet.

A. japonica rubra.—Beautiful rosy-red; stamens bright yellow.

QUEEN CHARLOTTE (*H. V. of Anemone*).—Large, semi-double flowers of pink.

WHIRLWIND (*H. V. of Anemone*).—Large semi-double pure white flowers.

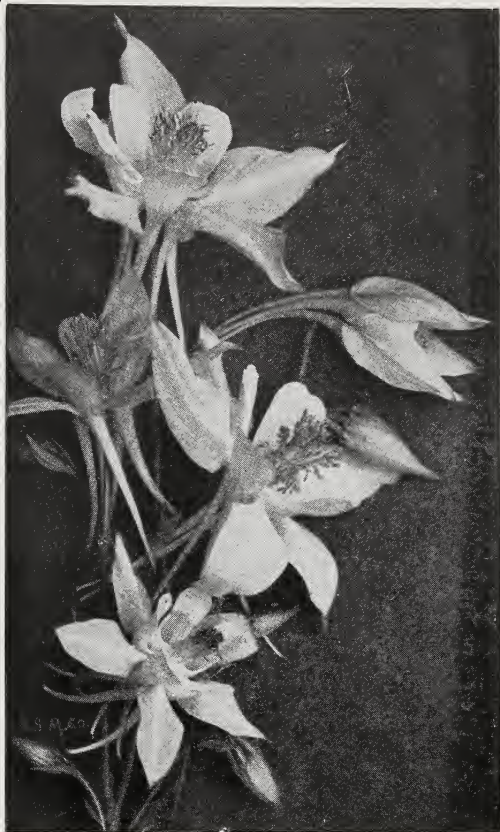
Anthemis - Camomile

A. tinctoria (Yellow Camomile).—Bushy habit, growing 15 inches high, producing large golden-yellow, daisy-like flowers during the entire Summer.

Aquilegia - Columbine

The Columbines should be grown by everyone who loves an old-fashioned garden.

A. LONG-SPURRED MIXED HYBRIDS. Height two feet. Bloom late Spring and early Summer. There are many varieties but we recommend these as most desirable. Colors: white, blue, yellow and maroon.



Aquilegia—Columbine.



Boltonia Latisquama.

Arabis - Rock Cress

A. alpina (Alpine Rockcress).—Very early Spring-flowering plant, valuable for edging and the rock garden, and also for the border, forming a dense carpet completely covered with pure white flowers.

Aster - Aster

Hardy. Fall-flowering.

A. tataricus (Tatarian Aster).—A distinct, large bluish-violet color. Very late bloomer. Height six feet.

Aster - Dwarf Alpine

This variety is indispensable for the rockery and hardy border.

A. alpinus Goliath (Big Rock Aster).—Large single flowers with yellow center. Color varies from pink to white. Blooms May-June. Height from six to ten inches.

Astilbe

A. Davidi (David Astilbe).—Its five to six foot stems are crowned with feathery plumes of deep rose-violet flowers during June and July.

A. Moerheimi (*H. V. of Astilbe*).—The spikes of beautiful creamy-white flowers are over two feet long. Very desirable. Height five to six feet.

Bocconia - Plume Poppy

B. cordata (Pink Plume Poppy). Beautiful in foliage and flower. Admirable in any planting; six to eight feet high. Flowers terminal panicles of creamy white during July and August.

Boltonia

B. latisquama (Violet Boltonia).—Tall, slender plant, four to six feet high, with numerous flowers of pink slightly tinged with lavender.



Campanula Carpatica -Carpathian Harebell.

Campanula - Bellflower

These are among the showiest of May and June-blooming perennials. Their bold spikes of flowers in rose-pink, blues and whites make them extra desirable, as they are fine for cutting. Period of bloom four to five weeks, but it can be prolonged if the flowers are pinched out as soon as they fade.

C. carpatica (Carpathian Bellflower).—A pretty species growing in tufts not over eight inches high. Flowers clear blue. Blooms June to October. Fine for edging.

C. latifolia macrantha (Royal Bellflower).—Large purplish blue flowers. May and June. Height three feet.

C. persicifolia (Peachleaf Bellflower).—Blue flowers during June and July, two feet high.

C. pyramidalis (Chimney Bellflower).—Forms a perfect pyramid four to six feet high, covered with porcelain-blue flowers in August.

Cassia

C. marilandica (Wild Senna).—Bushy, three to four feet high. Large panicles of bright yellow flowers from July to August. The foliage is also very pleasing.

Centaurea

C. montana (Mountain-Bluet).—Two feet high. Flowers large, violet-blue, from July to September. Delights in sunny position. Excellent for cutting.

Hardy Garden Chrysanthemums

Many are the lovely flowers that give a succession of beauty throughout the Summer day, but when Fall comes we have still the best in reserve, notably old-fashioned and really hardy Chrysanthemums. Dependable. Will not Winter-kill. Late Fall blooming.

Alice Howell—Orange Yellow.

Excellence—Dark red.

Golden Climax—Yellow pompon, extra fine for cutting.

Victory—Pure white flowers lasting until Winter.

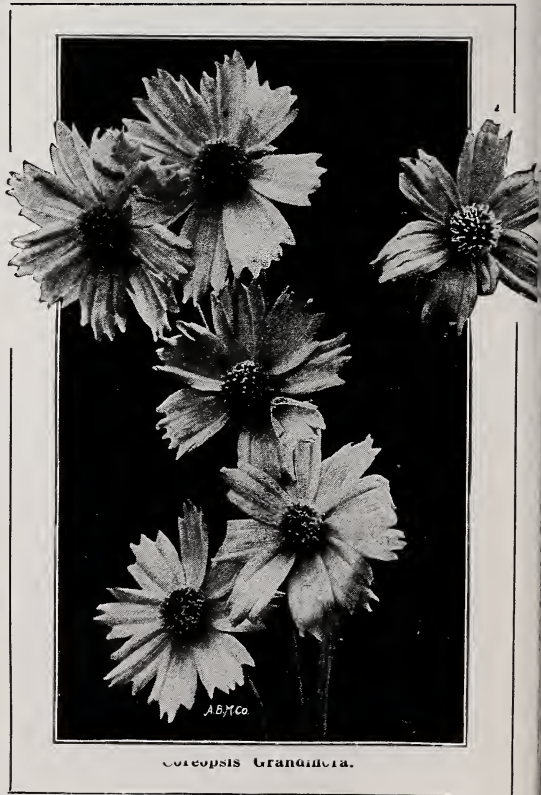
SHASTA DAISY (*H. V. of Chrysanthemum*).—A free-flowering plant with large, showy, daisy-like flowers of white with yellow centers. This is Luther Burbank's great production.

Convallaria - (Lily-of-the-Valley)

This is often starved and neglected and relegated to some poor, out-of-the-way corner; but this popular and fragrant subject, like most other plants, repays for being well treated, and if the bed is given a liberal top-dressing of well-decayed manure in early Spring, it will show the effect by increased size, number and vigor of the flowers. Very desirable for shady places.

Coreopsis

C. lanceolata (Lance Coreopsis).—Very popular. Flowers rich golden yellow. Invaluable for cutting. Main crop in June, but continues in bloom the entire Summer and Autumn.



Coreopsis grandiflora.



Delphinium - Larkspur

The Larkspur begins blooming in June and by cutting off the plants close to the ground as soon as each crop has faded, a second and third crop will succeed. The stalks are very tender and should be staked when about three feet high.

D. album—A pure white form of the dwarf species.

D. English Hybrids Mixed—Of strong, vigorous habit, with large flowers on spikes two feet long. We can supply these in mixed varieties only.

D. formosum (Hardy Larkspur).—The old favorite, dark blue with white center. Vigorous and free flowering.

BELLADONNA (*H. V. of Delphinium*).—Free blooming. Flowers a clear turquoise blue.

KING OF DELPHINIUMS—Strong grower. Flowers large, semi-double, of a deep blue with large white eye.



Dianthus Barbatus—Sweet William.

Dianthus Barbatus - Sweet William

The old-fashioned favorite producing great masses of bloom of extremely rich and varied colors. Flowers are lasting and fine for cutting.

D. barbatus (Sweet William).—A well known, attractive, free-flowering hardy perennial.

D. Newport Pink—The prettiest of the Sweet Williams. A lovely salmon.

D. Scarlet Beauty—A deep, rich scarlet.

D. White Beauty—A pure white.

Dianthus - Carnation - Clove Pink

Old favorites, bearing the sweet, clove-scented flowers in greatest profusion. They are indispensable for the edge of the hardy border and for cutting most desirable.

D. caryophyllus (Clove Pink).—By color: Pink, white, and scarlet.

D. Heddwigi (Japan Pink) (*H. V. of Dianthus*).—Mixed colors from pure white to richest crimson. Blooms all Summer.



Delphinium—Larkspur.

Dianthus - Grass Pink

D. plumarius (Grass Pink).—Bear sweet clove-scented flowers during May and June. Good for edge of hardy border and for cutting. One foot high. Assorted colors. Order by color.

Dielytra or Dicentra

D. spectabilis (Bleeding Heart).—The old-fashioned favorite, with long racemes of graceful, heart-shaped pink flowers. Does well in shade. Blooms in May. Height two feet.

Dictamnus - Gas Plant

D. albus—A very showy border perennial, 2½ feet high. Rosy pink flowers. Fragrant foliage and spikes of flowers during June and July. Must have the sun. Improves with age.



Dicentra Spectabilis—Bleeding Heart.



Gaillardia.

Digitalis - Foxglove

Old-fashioned, dignified and stately. Good in any garden. Four to six feet high.

D. ambigua or grandiflora (Yellow Foxglove).—Showy flowers of pale yellow marked with brown. June-July, two to three feet.

D. gloxiniaeflora (Gloxinia Foxglove) (*H. V. of Digitalis*).—A beautiful strain in white, purple, rose, or mixed. Order by color.



Heliothis Pitcheriana.

Gaillardia - Blanket Flower

G. aristata (Common Perennial Gaillardia).—One of the showiest perennials. Succeeds in any sunny spot. Begins to flower in June and continues all season. Flowers are large, center a dark red-brown, while the petals are marked with rings of brilliant crimson, orange and vermillion—often all combined in one flower. Excellent for cutting. Height two feet.

Geum - Avens

G. chiloense (Chilian Avens).—Pretty border plants about 15 inches high, producing showy, bright-colored flowers from May to July.

G. coccineum—Brilliant scarlet flowers.

Gypsophila - Baby's Breath

Thrives anywhere if sunny.

G. paniculata (Baby's Breath).—This possesses a grace not found in any other perennial. Blooms during July and August. Two to three feet high. Flowers are minute, of pure white, and together with its foliage give the plant a beautiful, gauze-like appearance. Excellent to use in combination with other flowers in bouquets.

Helenium - Sneezeweed

Desirable border plant. Succeeds anywhere if given a sunny location. Broad-spreading heads of flowers, useful for cutting.

H. autumnale (Common Sneezeweed).—Golden-yellow flowers during late Summer and Fall months. Five to six feet tall.

Helianthus - Sunflowers

Among the most effective for large borders among shrubbery or as large clumps. Free-flowering and succeed in any soil.

GOLDEN THINLEAF SUNFLOWER (*H. multiflorus fl. pl.*) (*H. V. of Helianthus*).—Large dahlia-like golden-yellow flowers in July and August. Four feet high. Flowers double.

Heliothis

Similar in general habit to Helianthus, but begins blooming in July and throughout August.

PITCHER HELIOPSIS (*H. pitcheriana*) (*H. V. of Heliothis*).—Three feet high. Flowers of a beautiful deep golden-yellow, about two inches in diameter. Useful as a cut flower.



Gypsophila Paniculata.



Hemerocallis - Day Lily

Popular plants belonging to the Lily family.

H. flava (Lemon Day Lily).—Best known variety; very fragrant; deep lemon-yellow flowers in June and July. Height 2½ to three feet.

H. fulva (Tawny Day Lily).—Grows from four to five feet high, with trumpet-shaped flowers of a neutral orange color with darker shadings. June and July.

Helleborus - Hellebore

H. niger (Christmas Rose).—Valuable because it yields with utmost freedom in very early Spring its beautiful blossoms—two to three inches across. Does best in a partially shaded position.

Heuchera - Alum Root

Most desirable dwarf, compact, bushy plants, 1½ to two feet high. Flowers July and August.

H. sanguinea (Coralbells).—A bright coral-red sort. Bears loose, graceful spikes of flowers in greatest profusion. Excellent for border and of great value for cutting.

Hibiscus - Rose Mallow

A desirable plant for the hardy border. Succeeds in any sunny position. Loves moist soil. Height three to five feet.

H. moscheutos (Common Rose Mallow).—One of the best kinds. Flowers four to eight inches across. Color, usually light rose with purple eye. Handsome in groups or in border along edge of shrubbery. Winter mulch desirable. Height three to five feet. Flowers in August, September.

H. oculiroseus (Crimson-Eye Rose Mallow).—Flowers of immense size, pure white in color, with deep velvety crimson center. Height three to five feet. Blooms August-September.

H. Mallow Marvels (*Hort. Var. of Hibiscus*).—A robust type of upright habit. Flowers large, in all the richest shades of crimson, pink, and white. Mixed colors only.

Hollyhock

Grow from four to six feet high and are a necessity in any old-fashioned garden. Order by color and state whether single or double is wanted.

Double Sorts: White, maroon, pink and yellow.

Single Sorts: White, maroon, pink, and yellow.

Hosta (Funkia) - Plantain Lily

These are among the easiest plants to manage. They are attractive for the border even when not in bloom because of their broad, massive foliage. Succeed in either sun or shade.

H. coerulea (Blue Plantain Lily).—Flowers lilac-colored in September. Two feet high.

H. plantaginea grandiflora (Big Plantain Lily).—Very large flowers in August and September.

H. undulata media picta.—Green and white variegated foliage. Purple flowers. Makes fine edging. Blooms July. Height two feet.

Iberis - Candytuft

Most desirable of dwarf plants (eight to 10 inches) with evergreen foliage completely hidden by dense heads of flowers early in Spring.

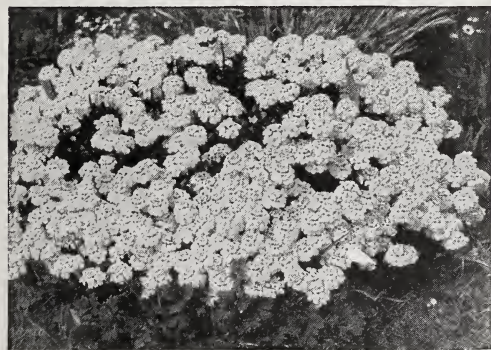
I. sempervirens (Evergreen Candytuft).—This sort bears innumerable flat heads of pure white flowers.



Hibiscus Moscheutos.



Hollyhocks.



Iberis.



Iris in the Shrub Planting

Iris

THE wealthy may enjoy their hothouse orchids, but nature has placed within the reach of all an absolutely hardy substitute growing in common soil, requiring little care and many varieties rivaling the rose for fragrance. Greek mythology has it that the Iris is a Messenger of the Gods, radiant with maiden divinity, bearing on golden wings direct from heaven the many hued rainbow into our gardens.

It is a difficult matter to decide which is the finest flower for gardens in Summer time. Surely the beauty of the Iris would make them rank high in any list, and it will be difficult to name any plant that produces such gorgeous flowers with less care and attention from the grower.

The varieties of Iris have multiplied rapidly recently, owing to the great demand for them, and there is still considerable uncertainty in the classification. We exercise extreme care to send out plants true to name and description.

Iris may be planted at any time when the ground is not frozen. If planted in the Summer they may need water for a few weeks until they are established. No manure should ever touch the roots. Bone-meal and lime is the best fertilizer. The varieties with fleshy root stocks should be set so they are barely covered with earth. Drought after flowering does more good than harm when the plants are once established, but they appreciate moisture before and during the flowering season.

Large Flowering Tall Bearded Iris

In description S. means Standards or upright petals. F. means Falls or drooping petals.

Arnolds—S. purplish bronze. F. rich velvety purple. Style arms, bronze striped violet. All divisions very long. Striking and handsome flowers.

Candelabre—Semi-early. S. very long, erect, bright violet with both lighter and darker shading, strongly spotted dusky violet at base on inside, giving a peculiar tigered effect. F. rich and velvety, dusky violet at base, dusky velvety violet striped on white. Unique candelabrum-like form and rich coloring.

Celeste—Delicately beautiful flowers, self-colored pale blue. Very free.

Chester Hunt—S. celestial blue. F. dark ultramarine blue with velvety overlay, bordered pale blue, shading at base.

Fairy—One of the most beautiful and graceful. Divisions are very broad. Standards incurving and falls recurving, producing a globular form. S. white with midrib of soft green, delicately veined blue at base. F. creamy white delicately veined blue at base. Style arm very conspicuous, bright clear blue. This sort is one of the indispensables.

Frederick—S. pale lavender. F. lavender barred with brown. Very pretty form, all divisions very full and long. Very free. One of the best for massing.



Monroe, Michigan

Dwarf Bearded Iris

These varieties afford fine edging for beds and borders. They usher in the season by beginning to bloom early in April. Like all intermediate and tall bearded Iris, they thrive in dry places and in partial shade and like lime.

These sorts are useful for edging and for planting in front of taller varieties. They flower through April and May—the earliest beginning the end of March.

Balceng Blue Beard—S. white flaked pale blue. F. sulphur marked purple.

Nudicaulis—S. violet. F. purple black.

Orange Queen—S. and F. beautiful clear yellow, beard orange.

Siberian Iris

Sibirica Orientalis—Flowers of brilliant blue. Small inner petals long and narrow, curving together at apex. Three outer petals with spatulate blade base greenish yellow veined brown, tinted reddish on flange. Buds enclosed in conspicuous red spathe valves.

Snow Queen—Structure similar to *Orientalis*, but all divisions pure white. Three larger outer petals golden at base. Very lovely.



Bearded Iris.

Fro—S. deep gold. F. brilliant chestnut brown with narrow border of gold. Style arms gold.

Her Majesty—Semi-early. S. and F. self-colored beautiful bright rose slightly lilacish. Color unique. Robust and free-flowering. The prettiest of the pink sorts.

Honorabilis—S. golden. F. rich mahogany-brown.

Loreley—S. light yellow. F. velvety purple at base, broadly striped on yellowish white and margined cream. Style arms deeper yellow.

Madame Chereau—One of the best, strong and beautiful. S. white deeply and elegantly frilled bright lobelia-blue. F. long and drooping, white bordered blue. Style arms bright blue.

Maori King—Coloring very brilliant. S. rich golden yellow. F. velvety crimson margined gold.

Pallida Dalmatica—The Pallidas are all tall, strong growers, with broad leaves and long stems of very large flowers, very sweet-scented. Pallida Dalmatica is one of the finest Irises grown, having enormous flowers of beautiful silvery-lavender on tall, strong spikes. It is unequalled for massing and fine for cutting. The true variety is very scarce.

Intermediate Iris

These are between the dwarfs and tall bearded in both time of bloom and in height.

Dorothea—Great fluffy flowers, seven inches across. The standards droop, giving the effect of a Japanese Iris. Both falls and standards are beautifully ruffled and of very delicate texture. The color is very soft mauve, almost tinted white, deeper at base of divisions. F. strong veined brown at base. Style arms tinted rosy lilac.

Etta—Very large flower with all divisions very long and broad. S. pale lemon-yellow. F. deeper shade of lemon-yellow, washed with gold at base. Beautiful.

Walhalla—S. light lavender. F. wine-red. Very large flowers.



Siberian Iris.



Lupinus Polyphyllus—Lupine.

Kniphofia - Torch Lily

BONFIRE TORCHLILY (*T. pfitzeri*) (*H. V. of Kniphofia*).—The early free and continuous blooming qualities of the Kniphofia make it one of the most valuable bedding plants for massing. In bloom from August to November. Rich orange-scarlet heads of bloom are borne on spikes of three feet in height. Very desirable.

Liatris - Gayfeather

Showy and attractive. Succeeds anywhere. Produces large spikes of flowers in July and August.

L. scariosa (Gayfeather).—Deep purple flowers, three to four feet high.

Linum - Flax

L. perenne (Perennial Flax).—Desirable for border or rockery. Two feet high. Light, graceful foliage and large blue flowers all summer.

Lobelia

Handsome border plants. Bloom from early August till late September.

L. cardinalis (Cardinal Flower).—Rich fiery cardinal flowers, 24 to 30 inches high.

Lupinus - Lupine

Effective plants. Large spikes of flowers. Blooms in May and June. Height three feet.

L. albus.—The white variety of Lupine.

L. polyphyllus (Washington Lupine).—Clear blue in color.

L. rosea.—A combination of light and dark shades of pink.

MOERHEIM (*H. V. of Lupine*).—Color a combination of light and dark shades of pink.

Lychnis - Campion

Easy culture, thrive in any soil.

L. chalconica (Maltese Cross).—A most desirable plant, heads of brilliant orange-scarlet in June and July. Two to three feet high.

Lythrum

ROSE LOOSESTRIPE (*L. roseum superbum*) (*H. V. of Lythrum*).—A strong-growing plant three to four feet high. Produces large spikes of rose-colored flowers from July to September.

Monarda

Showy plants of two to three feet in height. Succeeds anywhere. Aromatic foliage.

M. didyma (Bee Balm).—Brilliant crimson-scarlet flowers during July and August.

Myosotis - Forget-Me-Not

M. scorpioides (True Forget-Me-Not).—Hardy ever out of flower. Useful in shady spots.

M. alpestris (Alpine Forget-Me-Not).—The large Spring-flowering sort with intense sky-blue flowers, bright and attractive.

Papaver - Poppy

Showy and vigorous when once established. Foliage decorative but dies down in middle of Summer. Excellent in border but must be cut down and concealed by other plants in July. Blooms in early June. Height about three feet. Varieties we offer are select horticultural variations.

P. orientale (Oriental Poppy).—A fiery scarlet variety of this genus. Height three to 3½ feet. Blooms May and June. During their resting period after blooming care should be taken not to disturb the roots by cultivation.

P. APRICOT.—Apricot yellow.

P. BEAUTY OF LIVERMORE.—Crimson with black blotch.

P. GOLIATH.—Fiery scarlet.

P. ORANGE-SCARLET.—Color orange-scarlet.

P. nudicaule (Iceland Poppy).—Of neat habit, forming a tuft of bright green fernlike foliage from which springs throughout the entire season a profusion of slender leafless stems one foot high, graced with charming cup-shaped flowers. Color white, yellow and orange-scarlet. Order by color.

Pentstemon

P. laevigatus digitalis (Smooth Pentstemon).—Spikes of long, purple-white flowers with purple throats, during June and July. Two to three feet high.

P. Torreyi (Torrey Pentstemon).—Spikes of brilliant scarlet flowers in July and August. Three to four feet tall.



Lychnis Chalconica—Campion.



Peonies

THE modern Peony has been termed "The flower for the million and the millionaire."

There are supposed to be over 2,000 varieties and possibly more coming. They are not all good. We have eliminated each year certain varieties, added others from time to time, and offer you in this list varieties we think should be in every garden.

The rose has justly been called the Queen of Flowers, but the rose is more properly adapted to the southern climate and does not reach its best in that portion of the United States north of the Ohio river and east of the Rocky Mountains.

But the Peony is particularly adapted to the North temperate zone and our readers should not compare the modern Peony with the "Piney" of our childhood days.

When the Peony is once planted nothing more is required except a liberal dressing of bone-meal every Fall and each succeeding year will add to the size and beauty of the flower.

Free from disease and insects—no spraying required. The foliage is rich and glossy and a beautiful deep green. All of the improved varieties are deliciously sweet scented and many surpass the rose and carnation in delicacy of fragrance. The flowers are large in size and in color unsurpassable, with a range of varieties of almost every tint of pink, red and crimson, priced in our list, as well as the white and the ivory white.

Peonies should be planted in deep rich soil with a good quantity of bone meal incorporated. Do not use commercial fertilizer or manure and the roots should be set in the ground with the top bud three inches below the surface of the soil and the ground well firmed around it, using care, of course, not to damage buds.

For permanent planting, they should be set from 3 to 4 feet apart each way and left undisturbed indefinitely. When it is desired to intersperse Peonies among other hardy garden flowers they should be planted in groups of from three to five, each group to be of one variety.

In arranging a bed of Peonies of 15 to 50 roots we strongly urge the planting of one variety, for while sorts may be had that bloom in theory about the same time, the result is never satisfactory, for in fact, they come straggling into bloom one after the other and the effect desired is never wholly gained, while a bed of one fine sort is a magnificent sight.

Peonies should be planted in the Fall. To move Peonies at any other season except September means a setback

from which the roots do not recover for two years. The best time for shipment is during the month of September or early October. We can begin shipping in September and continue to fill orders as late in the year as the ground remains open.

There are hundreds of varieties. We list on pages following the varieties we are growing at our Ornamental Branch No. 4. You will see on page 183 a cut showing visitors inspecting our Peony block of June the 8th, 1922. Some of them were in bloom, as you will see. Others will bloom later, as the modern Peony blooms from Decoration Day on until late July, depending on selection of varieties.

AS FLOWERS FOR DECORATION DAY the Peony is pre-eminent—that is, two varieties which are known as *Officinalis Rubra* and *Officinalis Rosea*. If these were planted by every home owner, the graves of loved ones gone before would not suffer from any dearth of bloom on Decoration Day. If your selection is confined to two Peonies and you want very early blooming varieties for that day, select the *RUBRA* and the *ROSEA OFFICINALIS*.



The Peony Border.

Baroness Schroeder—Very large, globular, rose type. Flesh-white fading to milk-white. Fragrant. Tall and strong. Very free. Midseason.

Comte de Diesbach—Dark red. Early.

Couronne d'Or—Large, white, semi-rose type. Pure white with a ring of yellow stamens, around a tuft of center petals tipped with carmine. Medium tall. Strong grower. Free bloomer. Late.

Delachei—Large, medium compact, rose type. Violet-crimson, slightly tipped silver. Medium height, strong, erect and free. Late mid-season.

Delicatissima—Pink.

Duc de Wellington—Large, bomb, with white guards and sulphur center. Fragrant. Medium height. Vigorous and free. Late.

Felix Crousse—Very full, large, globular bomb. Very brilliant red. Fragrant. Strong, vigorous, medium height, free bloomer in clusters. One of the best reds.

Festiva Alba—Large, full, double, rose type. Creamy white with crimson spots in center. Dwarf plant. Fragrant. Late. Ships well and stands cold storage.

Festiva Maxima—Very large, globular, rose type. Very broad petals. Pure white center usually flecked crimson. Outer petals sometimes pale lilac-white on first opening. Very tall, strong and vigorous. Early. Most popular white for cut flowers.

Floral Treasure—Very large rose type. Pale lilac-rose. Tall, vigorous grower and free bloomer. Fragrant. One of the best commercial sorts. Midseason.

Fragrans—Solferino-red with slight silvery reflex. Full flowers. Vigorous grower. Excellent for cutting.

Golden Harvest—Medium size, loose, bomb or infernal rose type. Guards pale lilac-rose, center creamy white, on strong plants developing many wide petals of peach-blossom-pink. Fragrant. Dwarf, very free. Midseason. A very striking variety.

Humei—Cherry-pink with silver tip. Highly scented.

Lady Bramwell—Silvery pink. Late midseason.

La Sublime—Crimson, fine, full, fragrant.

Louis Van Houtte—Medium size, semi-rose type. Color deep carmine-rose tipped silver, with fiery reflex of dazzling effect. Fragrant. Medium height. Late.

Madame Crousse—Medium size, globular crown. Pure white center flecked crimson. Medium height, strong, free bloomer. Midseason. One of the very best whites.

Monsieur Dupont—Large, flat, semi-rose type. Cream-white tinged yellow, showing stamens and tipped bright carmine. Fragrant, tall, erect, free. Midseason.

Monsieur Jules Elie—Flowers immense, globular, very full high crown. Pale lilac-rose, collar lighter, shaded amber-yellow at the base. Fragrant. Medium height, strong grower. Early. Fine for cut flowers.

Nobilissima—Bright deep pink. Good stems. Lasts long.

Sarah Bernhardt—A superb variety of flat, compact, semi-rose type. Color apple-blossom pink, silver tipped, fragrant.

Queen Victoria—Large, globular, medium loose, low crown. Guards milk-white, tinted flesh, center cream-white touched crimson. Fragrant. Medium height, strong, free bloomer. Midseason.

Rosea Superba—Brilliant, deep cerise-pink, blooms compact and perfectly formed. Healthy growth, long stems, keeps well. Midseason.

Faenonia Tenuifolia—Fringe or cut-leaf Peony. Color dark crimson. June.



Phlox

THE Phlox is one of the most beautiful, most useful and most lasting of hardy perennials. The newer varieties are a great improvement over the old ones. Bear immense trusses of flowers of every shade, but yellow, passing from pure white to dark red and purple. There are also all the intermediate shades, soft rose, mauve, lilac and salmon, pink, dazzling scarlet, blood red, crimson and amaranth. Sometimes self-colored, sometimes variegated, star eyed, washed and shaded in various and beautiful fashion.

Their blooming season is in July and August. Coming at a time when the early Summer flowers have stopped blooming and the flowers of Autumn have not yet begun—they are glorious masses of color, indispensable to the carefully planned garden where a constant succession of bloom is maintained.

Phlox to be at their best should have a very rich soil and plenty of water. The clumps should be lifted and divided every third year. Dwarf varieties may be set 10 to 12 inches apart. Tall varieties 2 to 2½ feet apart. They may be planted from early until late Fall, or in the Spring during April and May.

The varieties we have selected, which follow, are among the most desirable now in cultivation. We will probably add to this collection from time to time and drop other varieties which may be superseded by better ones in the future. It is our aim to grow only the most satisfactory sorts and our customers can rest assured that we are sparing no pains to select varieties which will satisfy in every instance.

Albion—White with faint red eye.
Bridesmaid—White with large crimson center.
Bouquet Fleuri—White with carmine eye, large truss.
Champs Elysee—Bright, rosy magenta.
Elizabeth Campbell—New and very fine. Very large trusses light salmon changing to pink in the center. Coloring distinct.

Frau G. Von Lassburg—Pure white, immense panicles.
Hodur—Pink shaded white.
Independence—Large, early flowering white.
Lothair—Bright crimson.
Madame Pape Carpentier—Pure white, early. Dwarf.
Mrs. Chas. Dorr—A beautiful shade of lavender.
Miss Lingard—White with faint lilac eye. Very free flowering. Beautiful for massing.
Pecher d'Island—Lavender, cerise.
Rheinlander—A new sort of great beauty. Color a rare shade of salmon-pink, intensified by a distinct claret-red eye. Flowers and truss of unusual size.

Richard Wallace—White with large crimson eye.
Rijnstroom—A lively shade of rose-pink, very large.
R. P. Struthers—Cherry-red suffused salmon.
Sir Edwin Landseer—Bright crimson.
Sunset—Dark, rosy pink.
Terra Neuva—Lavender, light center.

Phlox Subulata

An early Spring-flowering type with pretty moss-like evergreen foliage, which during the blooming season is completely hidden under the masses of bloom. An excellent plant for the border, rockery, carpeting ground or covering graves.

Var. alba—White.
Var. rosea—Bright rose.



Phlox Subulata.





Physalis - Ground Cherry

P. francheti (Chinese Lantern Plant).—An ornamental variety of the Winter Cherry. Forms a dense bush two feet high. Produces its bright orange-scarlet lantern-like fruits freely.

Physostegia - False Dragon Head

One of the most beautiful of our mid-Summer flowering perennials. From a dense bush to four to six feet high.

P. virginiana (False Dragonhead).—Spikes of a bright but soft pink, delicate tubular flowers.

Platycodon

Closely allied to the campanulas. Grows two to two and one-half feet high. Begin blooming in July and continue about a month.

P. grandiflorum (Balloon Flower).—Deep blue, cupped, star-shaped flowers.

Pyrethrum Hybridum

Easy to grow. Loves the sun. Blooms in June. The fine fern-like foliage is attractive at all times.

Single-Flowering Sorts—Mixed colors only.

Double-Flowering Sorts—Crimson, pink, and white. Order by color.

Pyrethrum Uliginosum - Giant Daisy

Grows three to four feet high and is covered with large white, daisy-like flowers three inches in diameter from July to September.



Platycodon - Balloon Flower.

Rudbeckia - Coneflower

Indispensable for the hardy garden. Grow and thrive anywhere, giving a wealth of blooms which are well suited for cutting.

GOLDEN GLOW (*H. V. of Rudbeckia*).—A well known popular plant. Robust grower. Five to six feet high. Produces a mass of double golden-yellow flowers from July to September.

R. purpurea (Giant Purple Coneflower).—Produces all Summer large, showy, reddish purple flowers about four inches across.

Salvia - Sage

S. azurea (Azure Salvia).—A native species, grows three to four feet high, producing pretty sky-blue flowers during August and September in the greatest profusion.

Saxifraga - Megasea

Thrives in any kind of soil. Grows about one foot high. Good for border planting. Foliage a deep green which alone makes them desirable. Blooms in early Spring as soon as frost is out of the ground.

S. compacta.—Bright rose color.

Sedum - Stonecrop

S. acre (Golmoss).—A dwarf variety much used for covering graves; foliage green; flowers bright yellow.

S. spectabile (Showy Sedum).—One of the prettiest tall-growing species, 18 inches high. Broad, light green foliage with immense heads of handsome, showy, rose-colored flowers. Blooms late in the Fall.

Statice - Thrift

S. limonium latifolium (Thrift).—A most valuable plant with tufts of leathery leaves and immense candelabra-like heads, frequently one and a half feet high and two feet across, of purplish-blue minute flowers. July and August.



Rudbeckia - Coneflower.



Tritoma Pfitzeri (See *Kniphofia*, page 106).

Stokesia - Cornflower Aster

S. laevis—A native plant 18 inches high, bearing flowers freely from early June until September, of handsome lavender-blue which measure four to five inches across. Succeeds in any open, sunny position.

Thalictrum - Meadow Rue

MAIDENHAIR MEADOW RUE (*T. adiantifolium*). A beautiful variety with foliage like the Maidenhair Fern and miniature white flowers in June.

TRITOMA PFITZERI—See *Kniphofia*, page 106.

Tunica - Tunic Flower

T. saxifraga (Saxifrage Tunic Flower).—A pretty tufted plant with light pink flowers produced all Summer.

Veronica - Speedwell

V. spicata (Spike Speedwell).—An elegant border plant about one and a half feet high, producing long spikes of bright blue flowers in June and July.

V. longifolia subsessilis (Clump Speedwell).—The showiest and best of all the Speedwells. Forms a bushy plant two to three feet high with long, dense spikes of deep blue flowers from the middle of July to early September.

Vinca - Periwinkle

V. minor (Common Periwinkle).—An excellent dwarf evergreen used extensively in carpeting the ground under shrubs and trees or on graves where it is too shady for other plants to thrive.

Violas - Tufted Pansies

V. cornuta—Flower continuously for eight months in the year and are growing in favor rapidly. Their bright colors and free-blooming habit make them welcome additions to any garden. Mixed colors only.



Yucca Filamentosa Variegata.

Yucca

Y. filamentosa (Common Yucca).—Its broad, sword-like foliage, five to six feet tall, branched spikes of large, fragrant, drooping creamy-white flowers during June and July make it an effective plant for all positions.

Y. filamentosa variegata (Variegated Common Yucca).—Similar to *Y. filamentosa* but with medium yellow variegation.

Grasses

Can be used in many ways and positions with telling effect. The varieties listed are the best of the many.

Erianthus ravennae (Ravenna Grass).—Closely resembles the Pampas grass. Ten to 12 feet high.

Eulalia japonica gracillima (Maiden Grass) (*H. V. S. P. N.*).—Graceful habit, narrow foliage, bright green with silvery midrib.

Miscanthus sinensis—Has long, narrow, graceful green foliage and when in flower the attractive plumes are six to seven feet high.

Pennisetum alopecuroides (Crimson Fountain Grass).—This variety grows about four feet high, foliage narrow, of a bright green, while the cylindrical flower-heads carried well above the foliage are tinged with bronze-purple.

STRIPED EULALIA (*H. V. of Miscanthus*).—Very ornamental; long, narrow leaves, striped green, white, and often pink or yellow. Six feet high.

ZEBRA GRASS (*H. V. of Miscanthus*).—The long blades of this grass are marked with broad yellow bands across the leaf. Six to seven feet high.

F.G. VON LASSBURG

MRS. CHAS. DOOR

SIR EDWIN LANDSEER

Greening's Tri-Color Deluxe Phlox Collection

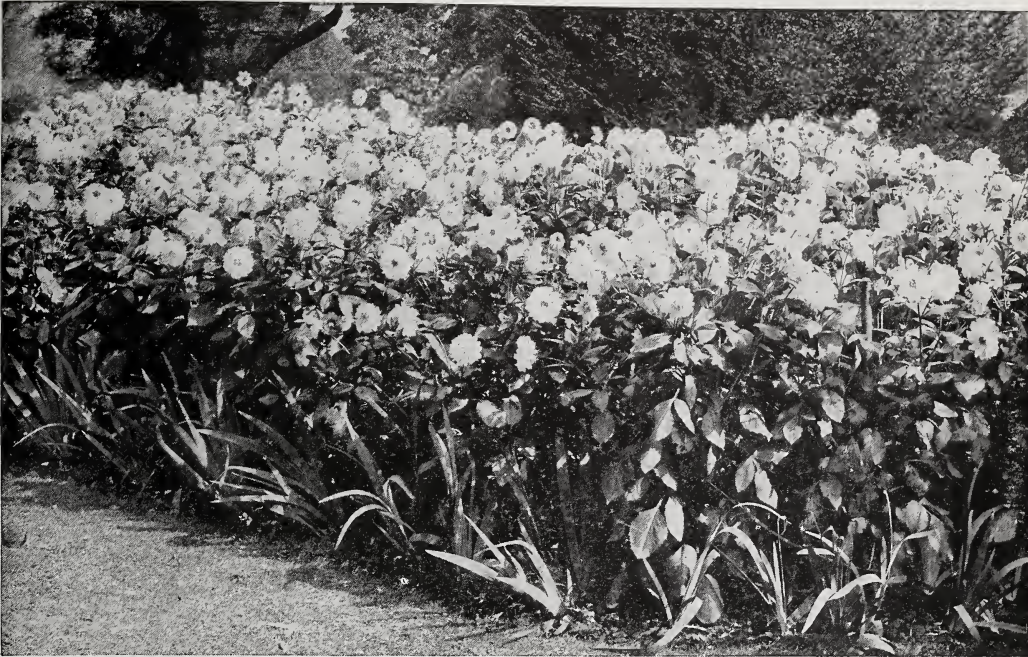
THOSE who love Phlox—and who does not—may have a wealth of bloom during July and August when other flowers languish. They are at the height of their season when early Summer flowers have stopped blooming and the Autumn flowers have not yet begun. The Phlox, although beautiful, is not a pampered queen requiring conditions for growth and location impossible to secure.

See Page 110 for Descriptions of Phlox.



Gorgeous Peonies

"The Flower for the Million and the Millionaire"



Dahlia Planting.

Garden and Greenhouse Plants (Not Hardy)

Caladium Esculentum (Elephant's Ear)

Effective in beds, borders and for planting on lawns. Will grow in any good soil. Height 4 to 5 feet, its immense leaves frequently three feet long.

Tuberose

One of the most beautiful Summer-flowering plants, producing spikes from two to three feet high, of double, pure wavy white flowers, delightfully fragrant. May be kept in bloom for a long time by planting from the first of April to the first of June. Very desirable for bouquets or baskets.

Dahlias

The Dahlia is one of the most showy of our Autumn flowers. Commencing to flower in August, they are a perfect blaze of bloom until stopped by frost in late Autumn. The Cactus, Single and Pompon varieties are especially fine for cut flowers. We know of nothing more showy for table decoration than a loosely arranged bunch of long-stemmed Cactus or Single Dahlias. They delight in a deep rich soil, should be planted three and one-half to four feet apart and be tied to heavy stakes to prevent strong winds from breaking them down. The roots should be dug up in the fall and hurg up in a dry cellar during the Winter. We have a large collection of all the best colors and varieties.

Colors—Dark red, pink, purple, red, scarlet, white yellow and the variegated.
Order by color.

Gladioli

The Gladiolus is the most beautiful of the Summer or tender bulbs, with tall spikes of flowers some two or more feet in height, often several from the same bulb. The flowers are of almost every desirable color, brilliant scarlet, crimson, creamy white, striped, blotched and spotted in the most curious manner. As cut flowers they are the most lasting of anything we know. By cutting the spikes when two or three of the lower flowers are open, the entire spikes will open in the most beautiful manner. Set the bulbs from six to nine inches apart and about four inches deep. Plant from middle of April to first of June. It is a good way to plant at two or three different times, ten days or two weeks apart. This will give a succession of bloom from July to November. In the Fall, before hard frost, take up the bulbs, remove the tops, leave to dry in the air for a few days, and store in some cool place, secure from frost, until Spring.

Colors—Cream, blue, pink, purple, red, scarlet, white, yellow and the variegated.
Order by color.

Cannas

No other bedding plant gives such uniformly good results. Succeeds in any sunny position. For best effect plant in large masses of one color. Place plants or bulbs two feet apart.

DWARF GROWING

City of Portland —Pink.	Hungaria —Pink.
Eureka —White	Meteor —Dark Red
Favorite —Yellow	President —Red
Gaiety —Scarlet and Yellow	



Hardy Bulbs

For Fall Planting

We give herewith a list of the choicest flowering bulbs. All the kinds mentioned under this head are intended only for Fall planting. Plant the bulbs three to four inches deep in a rich, loamy or light soil. Cover the beds six inches thick with leaves during Winter and remove early in Spring.

Crocus

Naturalized in the grass or planted thickly in irregular lines, as a border for taller-growing bulbs, or grown in any way whatever, the Crocus is always a cheery and charming little flower. It opens among the first flowers of early Spring, while the snow yet lies white on north hill-sides, in a cold, dull time, when its bright colors are much appreciated. We have them in blue, white, striped and yellow.

Hyacinths

This deservedly popular bulbous plant is without doubt the most beautiful and useful of all Spring-blossoming bulbs; its delightful fragrance and the numerous tints of its beautiful trusses of bell-shaped flowers render it invaluable to all lovers of flowers and afford pleasure and delight to millions of the human race. It is of the easiest culture, and with any reasonable care no one can fail to meet with success in its cultivation. It is, however, highly important to secure bulbs and have them planted in the Fall.

POT CULTURE—A four inch pot is the size for the successful growth of the bulb. It delights in light, rich, sandy soil; when placed in the pot the upper surface of the bulb should be above the soil. After potting, water thoroughly and place them in a dark, cool place in the cellar or out-of-doors, well covered with sand or other like material, there to remain until well rooted, when they should be taken in the house or greenhouse to bring them into flower. When in active growth they should have an abundance of water. Support the flower stems with light stakes if it is necessary, to keep them erect.

GLASS CULTURE—Hyacinths are very pretty and very interesting when grown in glasses. Their management thus is simple and as follows: Fill the glass with clean rain water, so that the base of the bulb when set in the receptacle will just touch the water. Set away in a cool, dark place until well rooted. A succession may be kept up in the manner recommended for pot culture. Change the water frequently, washing out the roots if necessary, to cleanse them of any foreign substance. A piece of charcoal in the glass will serve to keep the water sweet and also affords nourishment to the plants.

OUTDOOR CULTURE—Plant in October or early in November in soil deeply cultivated and rich. Set the bulbs about six inches apart and four inches deep, and when convenient place a handful of sand around each to prevent rot. Cover the surface of the bed with light, short manure as a protection to the bulbs during the severe months of Winter. Remove this covering as soon as the severe frost is gone in Spring. After flowering, and when the foliage is well matured, the bulbs may be removed from the soil and kept dry until the following Fall; or, if the bed is wanted for Summer-flowering plants before the foliage is ripened, the bulbs may be carefully removed and again covered with soil in any out-of-the-way corner of the garden until they have matured their foliage. Some cultivators allow their bulbs to remain in the beds several years undisturbed and with excellent results.

Colors—Dark blue, light blue, pink, purple, red, yellow, and white.
Order by color.



Hyacinths.

Lilies

No class of plants capable of being cultivated out-of-doors possesses so many charms; rich and varied in color, stately and handsome in habit, profuse in variety, and of delicious fragrance. They thrive best in a dry, rich soil, where water will not stand in Winter. After planting they require very little care and should not be disturbed for several years, as established plants bloom more freely than if taken up annually.

- L. auratum** (Goldband Lily).—Large graceful flowers of six petals, of a delicate ivory-white, thickly studded with chocolate-crimson spots and striped through the center a golden yellow.
- L. candidum** (Madonna Lily).—A delicately fragrant, pure waxy white lily of easy culture.
- L. longiflorum** (Easter Lily).—A pure waxy white, often tinged with green at the base; deliciously fragrant.
- L. pardalinum** (Leopard Lily).—An easily grown Lily for general culture. Scarlet, shading to rich yellow, spotted with purple.
- L. regale**.—A new variety from Western China. Hardy and very beautiful. Color, ivory white, shaded with pink and tinged with canary-yellow at the base of the petals. Blooms in July. Height 3 to 5 feet.
- L. speciosum** (Speciosum Lily).—Large white flowers of great substance with a greenish band running through the center of each petal.
- L. speciosum rubrum**.—White, heavily spotted with rich, rosy crimson spots.
- L. superbum** (American Turk's Cap).—A beautiful native variety, bright reddish orange, spotted, 3 to 6 feet high; bloom in August.
- L. tigrinum** (Tiger Lily).—Bright orange-scarlet with dark spots; fine.



Narcissi.

Narcissi

Admirably adapted for garden decoration in early Spring. They are easily cultivated; hardy. Very showy and fragrant. Should be planted in the Fall, same as Tulips. Fine for Winter culture in pots or boxes.

Jonquils

A species of Narcissus with fragrant bright yellow flowers, suitable for house or garden culture. Require the same treatment as Narcissus.

Tulips

The Tulip is so perfectly hardy and so easily cultivated that it never fails to please. We know of nothing that for the amount of money invested will give a more gorgeous show during early Spring. It thrives well in almost any soil. Should be planted during October and November. Plant three inches deep in rows nine inches apart. Allow the ground to freeze before putting on their Winter covering. They may remain in beds two or three years, when they should be taken up and replaced with new bulbs. If desired, bedding plants may be planted between the rows, as the plants will not have made much growth before the Tulips have ripened up, when the tops may be raked off and the plants allowed to cover the whole bed. Tulips succeed admirably in pots or boxes for sitting room or parlor decorations during Winter.

SINGLE—In colors of pink, blue, red, white, yellow and variegated.

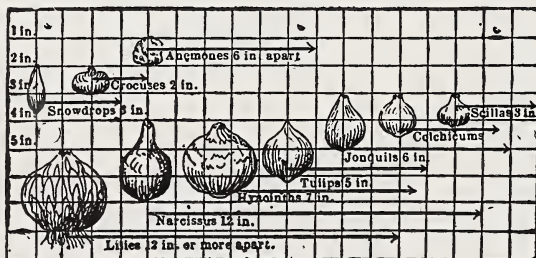
DARWIN TULIPS—These are a strain of long-stemmed late blooming self-colored Tulips. Various colors, mixed.

DOUBLE—In colors of pink, purple, red, yellow and white.

PARROT TULIPS—This species with curiously enlarged and cut or frayed petals and odd color markings.



Darwin Tulips.



Depth to Plant Bulbs.



The Greening Landscape Company

An Association
of
Graduate Landscape Architects

Plans and Specifications
Prepared for Parks, Es-
tates, Cemeteries, Golf
Courses, Sub-divisions,
Country Clubs, Resi-
dences, Etc.

THE GREENING LANDSCAPE COMPANY
IS A SUBSIDIARY OF THE GREENING
NURSERY COMPANY AND WAS OR-
GANIZED IN 1912.



Landscape Gardening

PROFESSOR BAILEY in his CYCLOPEDIA OF HORTICULTURE defines Landscape Gardening as the application of garden forms, methods and materials to the improvement of the landscape; and the landscape, in its relationship, is any area, large or small, on which it is possible or desirable to develop a view or a design. It will be seen from reading the above definition that Landscape Architecture in its broadest sense requires its practitioners to accumulate a knowledge of many things, both theoretically and practically.

Landscape Gardening a Science

It is regrettable that the majority of so-called Landscape Gardeners who happen to know a few shrubs, term themselves Landscape Architects, and we take this opportunity of truthfully informing you that landscape architecture taken as a whole is one of the most intricate professions, and that it is both a science and an art, a knowledge of which can only be attained after a college course.

The public has been led to believe that anyone who could plant a tree or seed a lawn is a Landscape Architect. Most of these individuals merely use the term to aid them in selling nursery stock, and they know nothing whatever of the requirements of grace, unity and harmony, nor proper selection of plants and the placing thereof to intensify and create interesting features to make the home surroundings pleasing, interesting and beautiful.



Requirements of a Landscape Architect

work, for landscape architecture is truly one of the fine arts where the master hand uses the materials of nature as his pigments with which to create a constantly changing picture as the seasons come and go.

The requirements of a real Landscape Architect are such as to make them proficient in civil engineering, architecture, surveying, roadmaking, draining, construction and have a profound knowledge of plants and these only form the ground

Success Proven by Our Achievements

professional standing. We have a number of experienced or graduate Landscape Architects who devote their whole time to this work and can point with pride to many parks, country clubs, golf courses, schools, public buildings, cemeteries and homes that have been designed and planted by us, which will vouch for our professional standing and ability.

From the very inception of this Company we have insisted that our associates in this Company be Landscape Architects of the highest qualifications and professional

Professional Service

that insures you getting the highest quality of nursery stock.

And so we offer a business and professional combination that embodies a service complete in every detail. A service that offers the highest perfection of Landscape Art and design—a service

Satisfaction Guaranteed on Finished Job

etc., are based on a fixed standard at the lowest possible price to cover cost of materials and overhead. Being able to furnish the plants necessary in connection with our professional service, does away with ordinary uncertainties, relieving the owner of all worry, and it is our policy to satisfy each and every client, feeling that every plan designed and planted by us is an advertisement and that our ability must and will be judged by the results of our work. Therefore, clients are assured that our work is done upon honor.

Our prices for individual service to design plans, complete specifications, supervise planting and construction work, cost of stock,

Clients should remember that the planting of a garden is for a lifetime, and that it is better to anticipate trouble than to try to remedy it after it occurs. Hence it is advisable to entrust the work only to an organization of reputable business men. Landscape Gardening is done for beauty's sake and the enhancement in value of property and should never be left to chance.

Many small places can be designed without a personal visit of the designer if we have photographs and measurements. To this end we have prepared a Profile Sheet especially for this purpose, which renders it an easy matter to send the data required. Correspondence is invited from small home owners. Large jobs that require a personal visit from the Landscape Architect and topographical survey are handled in a different manner, which will be explained in person by one of our representatives or by letter to those who are interested, but our terms are reasonable and we gladly give references, or will show you work we have done which will aid you in making your decision.

The Greening Landscape Company
Monroe, Michigan



**AN INTERESTING FOUNDATION PLANTING, COMPOSED OF EVERGREENS,
SHRUBS, PERENNIALS AND VINES.**

The upright growing evergreen, *Thuja Occidentalis Pyramidalis*, could be any evergreen of pyramidal-growing type. The large, ball-shaped evergreens are *Thuja Occidentalis Sibirica*, or could be *Thuja Occidentalis Globosa*. The horizontal-growing evergreens are *Juniperus Pfitzeriana*. The flowering shrubs are *Hydrangea Arborescens Sterilis*, and the other shrubs are *Berberis Thunbergi* or could be *Ligustrum Regelianum*. The single shrub near the tall type of evergreen at corner is *Lonicera Fragrantissima*. The low-growing plants having flaglike leaves are *Iris*. The vigorous growing vine is *Ampelopsis Engelmanni*. The photograph from which the above cut was made was taken the second season after planting, and is a portion of our landscape treatment of the home of F. W. Ruggles at Alma, Michigan.



ELEVATED TERRACE ROSE GARDEN.

Designed and planted by the Greening Landscape Architects. We ask no pay until job is completed.



AN ARTISTIC SUNKEN GARDEN.

Critics consider this one of the finest and most artistic small sunken gardens in America. Let us briefly analyze the picture of the home of our client, Mr. E. D. Speck, Grosse Pointe, Michigan.

Viewed from any position this garden is alive with interest. It contains all the essentials considered in good taste in fine art—ornate, yet not overdone. It is harmonious in color and texture of material used. It is soft in tone, with sufficient color to avoid flatness. The shadows cast upon it by the trees give it a cool and restful appeal. The gray flagged stone walks and rough hewn stone risers blend beautifully with the appealing softness of the design in general. It is attractive but not gaudy, and dignified without stiffness.



TWO YEARS AFTER PLANTING.

Irving Park, Battle Creek, Michigan, consisting of one hundred acres, two years after planting by the Greening Landscape Co. These grounds were converted from a marsh a mile long into one of the prettiest public parks in the state.



NO. 1. REPRODUCTION OF PHOTOGRAPH TAKEN IN IRVING PARK, BATTLE CREEK, MICHIGAN, IN JULY, 1920, IMMEDIATELY AFTER STOCK WAS PLANTED.

The Landscape Department of the Greening Nursery Co. planned and planted this park. Possibly you have seen it and know how a bog used as a dumping ground was transformed into a thing of beauty.



NO. 2. HERE IS A CUT FROM A PHOTO TAKEN AT PRACTICALLY THE SAME PLACE AS NO. 1 ON THIS PAGE BUT JUST TWO YEARS LATER—I. E., JULY, 1922. DESIGNED AND PLANTED BY OUR LANDSCAPE DEPARTMENT.



NO. 20 (BH)

An ideal planting before an ordinary house. It is incomplete, however, and we suggest continuing the planting around the foundation at the right of the picture to the far side of the bay window, terminating midway between the house and tree with three shrubs, using either *Lonicera Tatarica Rosea*, *Philadelphus Coronarius* or *Grandiflorus*, *Diervilla Rosea* or *Spirea Van Houttei* planted in triangular form with point to the front.



NO. 6 (BH)

An excellent planting for Fall color effect. No. 1 is *Hydrangea Paniculata Grandiflora*; No. 2 is *Berberis Thunbergi*, and No. 3 is *Ampelopsis Veitchi*, or Boston Ivy.



BUNGALOW (5-BH)

Regarding the planting about the cozy home above, Mr. Greening has this to say: "A setting worth while and appropriate, which adds to the coziness of this bungalow home. Note how effectively the house is blended into its resting-place by the breaking of the angle at the intersection of house and ground. This same effect can be produced by the use of the following stock: No. 1, *Lonicera Tatarica* Rosea; No. 2, *Berberis Thunbergi*; No. 3, *Spirea Van Houttei*; No. 4, *Dierilla Florida* Rosea; No. 5, Climbing Rose, *Crimson Rambler* or *Dorothy Perkins*; No. 6, *Philadelphus Lemoinei*; No. 7, *Philadelphus Coronarius*; No. 8, *Berberis Thunbergi*; No. 9, is *Spirea Van Houttei* and No. 10 is *Cydonia Japonica*."



NO. 13 (BH)

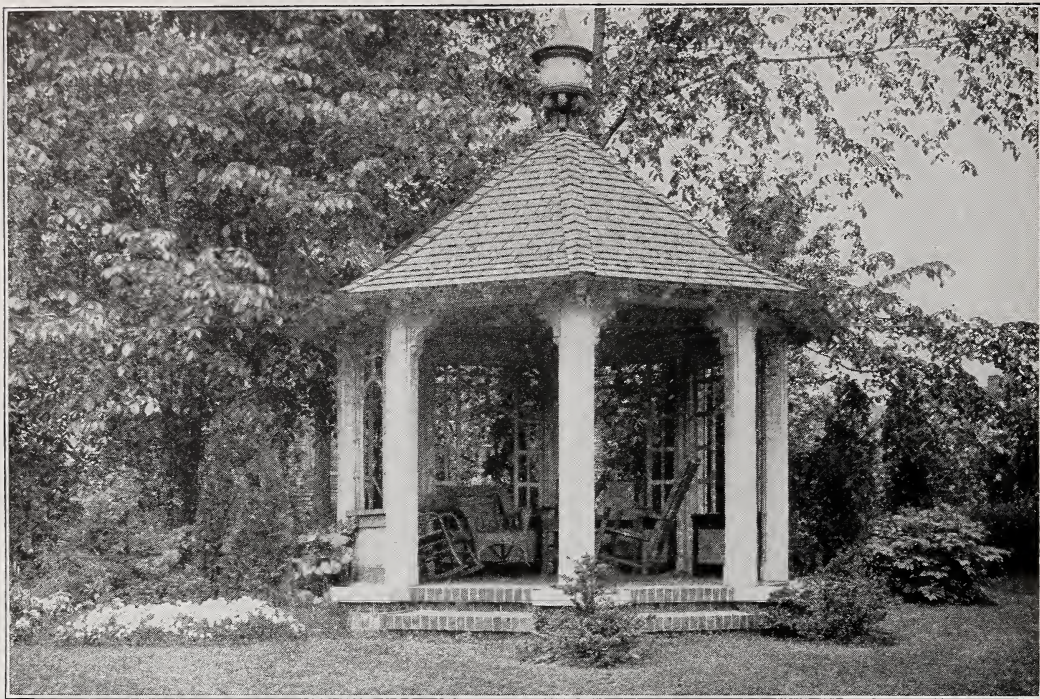
This planting is very simple and in good taste. The vines on the porch are *Ampelopsis Veitchi*, or *Boston Ivy*, and those at the right bearing the tiny white flowers are *Clematis Paniculata*. The border is *Berberis Thunbergi*. Note how graceful in form when let grow naturally without shearing. The early Fall coloring of the vines and barberry will be very striking by its brilliancy, followed by the scarlet berries of the Barberry and black berries of the *Boston Ivy* and the white, fluffy seed pods of the *Clematis*.



**AN EXCELLENT LANDSCAPE TREATMENT OF A LOT LINE WHERE SPACE IS
NARROW AND LIMITED.**

A beautiful ornamental fence with a border planting of an assortment of perennials, interspersed here and there with hardy, tall-growing roses, or a suitable flowering shrub has created this interesting place of beauty.

**We guarantee our stock
and ask no pay until job
is completed.**



**REST HOUSES SUCH AS THE ABOVE ARE FASCINATING TO THEIR OWNERS
AND ARE IN CONSTANT USE.**

The ease and comfort, also the neatness and dignity expressed in this garden feature is truly a work of art and a conception of only an experienced Landscape Architect. Note the use of specimen evergreens, shrubs and perennials and how well they blend together and serve their purpose. Such problems as these are the daily tasks of our Landscape Architects.



WOULD YOU BELIEVE THAT THIS IS A FACTORY?

Where are the dump heaps, the cinders, the rubbish so commonly seen in factory surroundings? Progressive business men see the value and know the business asset of well-kept, clean and beautiful factory surroundings. Business men live most of their lives within their offices which are most usually a part of, or adjacent to the factory. Should not these surroundings be pleasant, inspiring and beautiful? Not only for the owners' sakes but also that of the employees?

There is no business investment that can bring so much return as a small amount of money spent in beautifying factory surroundings, because all visitors will be most favorably impressed.



A WELL BALANCED PLANTING.

This planting is an example of artistic simplicity designed and executed by one who was thoroughly familiar with his materials as to height, form, etc. In this there are only four varieties of shrubs and evergreens. This is a good example of high-class work that may help you readily to decide between proper and improper planting.

- | | | |
|-----------------------------------|-----------------------------------|---|
| No. 1 <i>Spirea Van Houttei</i> . | No. 3 <i>Berberis Thunbergi</i> . | No. 5 <i>Lonicera Tatarica</i> Rosea. |
| No. 2 <i>Thuja Occidentalis</i> . | No. 4 <i>Spirea Van Houttei</i> . | No. 6 <i>Aristolochia Sipho</i> or Dutchman's Pipe. |



A BEAUTIFUL PLANTING.

This view illustrates the beauty of planting shrubs as a banking. Observe the open lawn with its restful, soothing color. In this planting the tall and low growing shrubs offer a well balanced and attractive contrast. The clipped hedge is in good taste with the straight lines of the house. The planting consists of the following stock indicated by numbers and planted at an average of three feet apart.

- | | |
|--|--|
| No. 1 <i>Spirea Van Houttei</i> . | No. 6 <i>Philadelphus Coronarius</i> . |
| No. 2 Dwarf Evergreen (<i>Pinus Mughus</i>). | No. 7 <i>Lonicera Halliana</i> . |
| No. 3 <i>Spirea Van Houttei</i> . | No. 8 <i>Ampelopsis Veitchi</i> . |
| No. 4 <i>Deutzia Gracilis</i> . | No. 9 <i>Ligustrum Ibo</i> . (For hedge, |
| No. 5 <i>Berberis Thunbergi</i> . | plant one foot apart). |



*Designed and Planted by the Landscape Dept.
of the Greening Nursery Co., Monroe, Mich.*

A WEALTH OF BEAUTY—JACKSON INTERMEDIATE SCHOOL.

Who can put a price on the value of this school landscape development? The picture shows a side view taken from the top of a hill looking down towards the street. The expedient was used of planting carefully selected flowers, shrubs, dwarf trees, evergreens, etc., to relieve the steepness of the hillside and give beauty and character to the magnificent structure. This view shows only a small section of the grounds. The playgrounds are in the rear. Thousands of shrubs, flowers and trees are planted on the Botanical Garden idea plan, representing a wonderful educational feature in the study of trees and plants for teachers and pupils to gather on the lawn, text book in hand, studying the beauty of foliage and flower and the gradual development of the many varieties of trees and plants arranged in an artistic and orderly manner, a pleasure and delight to students and teachers.

MOUNT PLEASANT PUBLIC SCHOOLS

G. E. Ganiard, Superintendent
Mount Pleasant, Michigan

R. E. Cheney,
High School Principal.
Greening Nursery Co.,
Monroe, Michigan.

October 24, 1921.

Gentlemen:

You are certainly deserving of commendation for the very excellent plans you made for landscaping the grounds around our high school, and for the splendid stock you sent us. I never dreamed plants could do so well in one year. It is unusual to get immediate effect from landscape planting, but people who see our grounds conclude they must have been planted two or three years ago.

Beautiful grounds have just as much educational value as good interior decoration. In fact, a beautiful exterior is enjoyed not only by pupils attending school, but by the whole community. Since you planted our grounds, hundreds of our citizens have taken steps towards beautifying their home surroundings. In this way the school has led in a commendable civic enterprise.

I suggested that our plans should include several native plants. These plants we find very valuable in connection with our work in Natural Science. It is easy to obtain specimens for classroom work, and to study the habits and life history of a great variety of plants.

You would certainly be doing a splendid service to Michigan and surrounding states if you would make a special effort to induce school authorities to become interested in beautifying their grounds.

Yours truly,

(Signed) G. E. GANIARD,
Superintendent.



EAST INTERMEDIATE SCHOOL—JACKSON, MICH.

The treatment of these school grounds was considered a problem for reasons of their high elevation and pronounced declivity. The school building is located 130 feet from the street line on an elevation of 25 feet above the level of the sidewalk in the street. The problem was happily solved by building two grass terraces and relieving the appearance of the steep hill and effects of the terraces by means of careful landscape planting of shrubs, trees, evergreens, hedges, etc., producing a landscape effect claimed to be the most beautiful of any school grounds in the state. The landscape development of these show a result of three years from the time of planting.

BOARD OF EDUCATION, HILLSDALE, MICHIGAN

Mr. Charles E. Greening,
Monroe, Michigan.
Dear Sir:

August 23, 1910.

The trees and shrubs you planted for us in November, 1909, are doing nicely, and although we expected to get but little good out of them the first year, yet the places where they have been planted are the beauty spots of the town, and the elegant appearance of the school grounds has attracted the attention of nearly every stranger who comes here. I would not have thought it possible to make such a change in the appearance of school grounds as has been accomplished in the past year.

Another thing that has been especially noticeable is the fact that at all of the buildings, the pupils have shown a pride in the appearance of the grounds instead of being destructive as we feared, they have rather aided in keeping the grounds in a neat condition.

The teachers find the combination of shrubs a help in their Nature studies. As you know, we have a course in Agriculture, and the instructor has used the shrubs to furnish examples in layering and other things relating to the technique of plant growth, and to illustrate the value of insecticides and the use of sprays.

This being a town which has no public parks, the town itself being a park, the school grounds have been parks and all during the vacation weeks there are lots of visitors who show the greatest interest in the beautifying of the grounds, although not otherwise interested in the schools.

Taking it all-in-all, I think it was one of the best investments we ever made when we got you to make out a plan for beautifying the school grounds, as the beauty grows from year to year, and by having a plan for the work, it makes no difference whether the membership of the board changes every year or not. The work can be continued each year, or if circumstances require, some work can be done one year and continued after a lapse of several years, as your way of doing the work by groups makes it possible to do a little bit at a time and always have something that shows up well.

Very truly yours,

BION WHELAN,

Secy. Board of Education.



COMFORTABLE HOME SURROUNDINGS.

The elements—sun, wind and rain—tend to deteriorate the value of the house from the time it is finished. But these same elements are the best friends of tree, shrub, and other plants. Age is an asset in a planting and the one above is cool, restful and inviting because of the magnificent tree which is the central feature, flanked on either side with a shrubby border and with a stretch of beautiful lawn between.



CLASSIC ROSE GARDEN.

Horace E. Dodge estate, Detroit, Michigan. Designed and planted by The Greening Landscape Co.



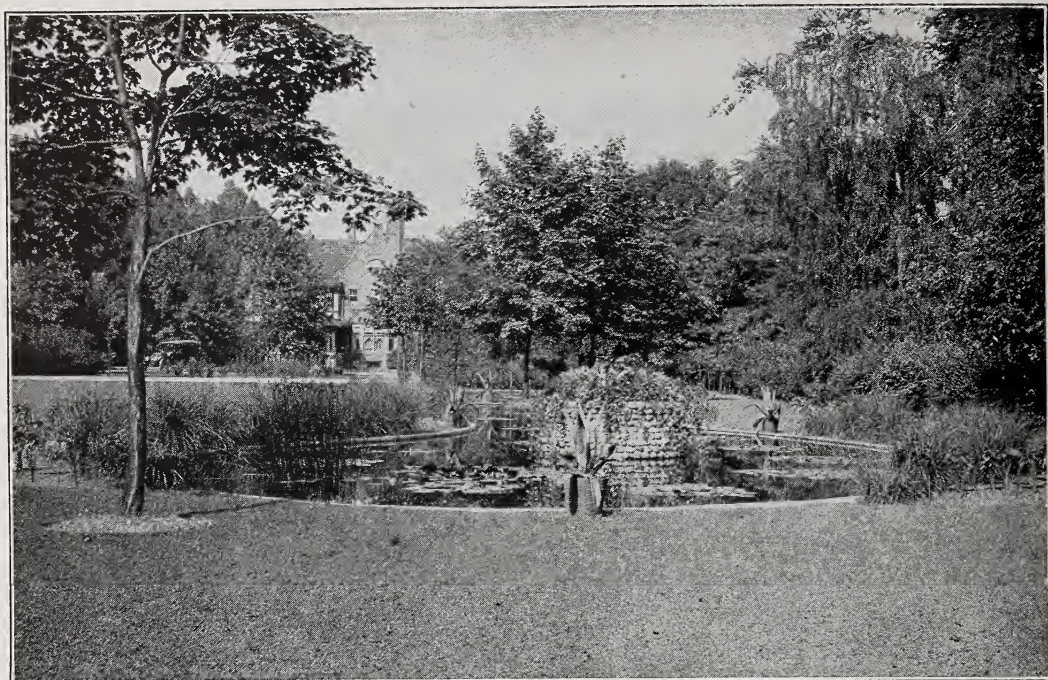
SUNKEN GARDEN.

This beautiful garden, property of R. Stranahan, President of Champion Spark Plug Co., Toledo, Ohio, speaks for itself in reference to the quality of work designed and planted by the Greening Landscape Architects. The garden shows one year's growth. We ask no pay until job is completed to the satisfaction of the client.



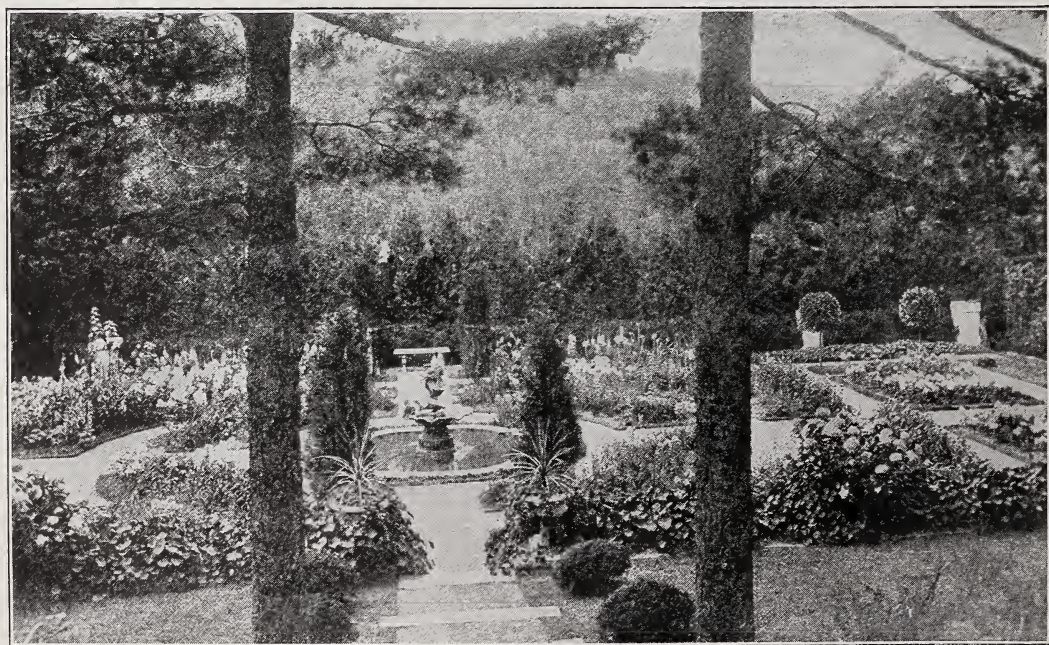
SYLVAN RETREAT OF WONDERFUL BEAUTY.

Country estate of Howard Coffin, Detroit, Michigan. Designed and planted by the Greening Landscape Co.

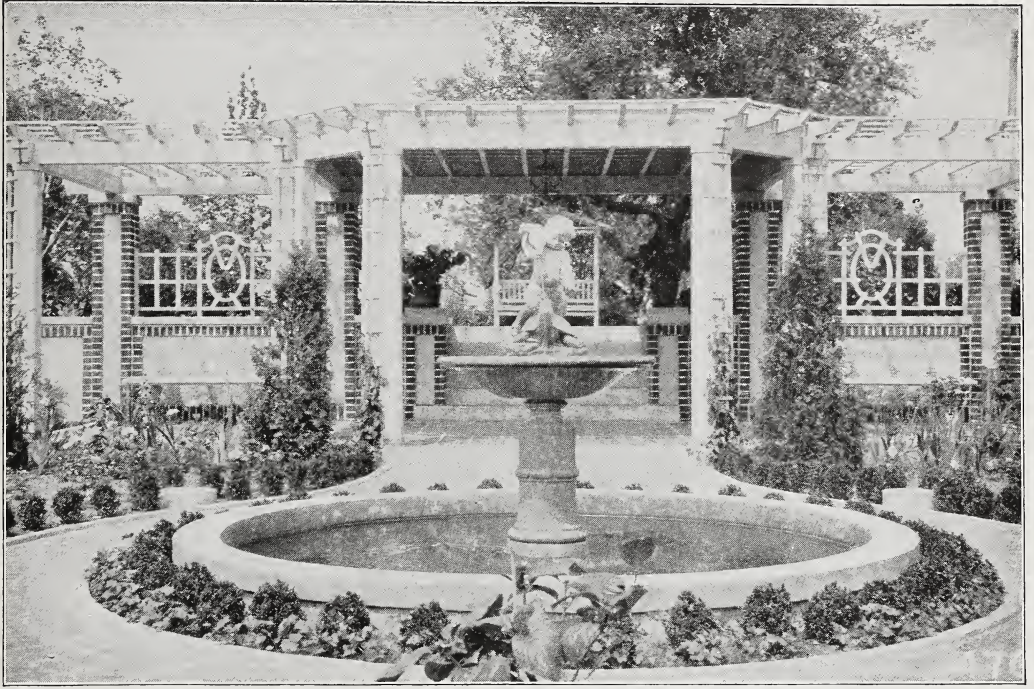


PICTURESQUE GARDEN.

Picturesque garden of the John Dodge estate, Detroit, Michigan, by Greening Landscape Co.



ARTISTIC PERENNIAL GARDEN OF RARE BEAUTY.



CUPID FOUNTAIN AND PERGOLA.

R. Stranahan gardens, Toledo, Ohio. Artistic sunken garden, by The Greening Landscape Co.



Greening Avenue at the Greening Nurseries. Who can put a price on the value of such a beautiful drive, lined with magnificent specimens of Norway Spruce evergreens?

Swimming Pool and Formal Garden

Amazing transformation in three and one-half months on the property of John E. Jones, Jackson, Ohio. All buildings, walls, balustrades, swimming pool and plantings were designed and executed by the Greening Landscape architects.



Before Planting, May 1st, 1920.



After Planting, Three and One-half Months Later, August 17th, 1920.



What Makes a Plant Grow

Generally speaking, soils are supplied with the necessary foods for plant growth, and the sun furnishes the heat and light required for best results.

Most soils contain an abundance of plant food, but if not they can be easily supplied by the use of well-rotted stable manure, or commercial fertilizers and but one application each year is required.

The important factor remaining is moisture, and moisture not only satisfies the thirst of the plant, but also combined with the heat of the sun, renders the plant food in the soils available for the use of the plants.

It will be seen from this that moisture must be supplied in liberal quantities frequently during the growing season. Merely to sprinkle the surface of the soil is not sufficient, because a mere sprinkle would not reach the roots, but quickly evaporate, and a light sprinkling of the tops of the plants will also do more harm than good.

The correct method is to allow the water to run freely from the hose until a pool of water will remain about the plants after the plants are watered.

It is suggested that a slight depression be left about each plant when setting rather than to hill it up, which would cause both rainfall and the water supplied artificially to run away from the plant and not reach its roots.

If you wish to secure real results with trees and plants give them an abundance of water frequently during the growing season. Do not depend upon rainfall—it is too uncertain.

To conserve moisture—stop its evaporation by removing the weeds and keeping two to three inches of top soil loose by cultivation. This is especially necessary in commercial orchards or other large plantings of trees.

The Greening Nursery Company
Monroe, Michigan



We herewith list some of the freer blooming nursery plants, according to their season of bloom. Also height of the perennials.

APRIL

Shrubs

Benzoin aestivale.
Caragana.
Cercis canadensis.
Forsythia (in variety).
Ribes (in variety).
Spirea thunbergi.
Tamarix africana.
Tamarix indica.

Perennials

Iberis. 9 to 15 in.
Iris (dwarf).
Saxifraga. 1 to 3 ft.

Bulbs

Crocus.
Tulips (Early, Double and Single).

MAY

Shrubs and Trees

Amelanchier.
Aronia.
Berberis.
Catalpa.
Cerasus.
Chionanthus.
Cornus (also June).
Cotoneaster (also June).
Crataegus.
Cydonia.
Deutzia, Pride of Rochester.
Exochorda.
Gleditsia.
Liriodendron.
Lonicera (also June).
Prunus japonica.
Prunus triloba.
Pyrus bechteli.
Pyrus floribunda.
Robinia.
Spirea arguta.
Spirea prunifolia.
Spirea reevesiana.
Spirea Van Houtte.
Syringa (also June).
Viburnum carlesi.
Viburnum lantana.

Vines

Vinca.
Wisteria.

Perennials

Aquilegia. 2 ft.
Alyssum. 12 inches.
Dielytra or Dicentra. 1 to 2 ft.
Iris (Med. and tall).
Myosotis. 6 to 8 ins.
Papaver nudicaule. 3 ft.
Peony officinalis. 18 ins.
Phlox subulata. 6 ins.
Saxifraga. 1 to 3 ft.
Viola cornuta (till Oct). 6 to 8 ins.

Bulbs

Darwin Tulips.
Hyacinths.

JUNE

Shrubs

Amorpha.
Calycanthus.
Colutea.
Cornus sanguinea.
Cornus stolonifera.
Cornus paniculata.
Cotoneaster.
Cytisus.
Deutzia (Except Pride of Rochester in May and D. crenata in July).
Diervilla or Weigela.
Kerria.
Lonicera
Philadelphus (June and late May).
Potentilla (June till Oct.).
Rhodotypos.
Rubus odoratus.
Sambucus.
Spirea salicifolia.
Stephanandra.
Syringa josikea.
Syringa villosa.
Viburnum (in variety except those in May).

Vines

Clematis coccinea (till frost).
Clematis henryi (till frost).
Clematis, Mad. Edw. Andre(June and July).
Lonicera halliana (all season).



Perennials

Aquilegia. 2 ft.
 Campanula. 1 to 3 ft.
 Delphinium. 3 to 4 ft.
 Dianthus barbatus. 2 ft.
 Dianthus (Grass Pinks). 1 ft.
 Dielytra or Dicentra. 1 to 2 ft.
 Digitalis. 4 ft.
 Hemerocallis flava. 3 ft.
 Lilium candidum. 3 to 4 ft.
 Lilium auratum. 3 to 4 ft.
 Lupinus. 4 ft.
 Papaver orientale. 3 ft.
 Pentstemon. 4 ft.
 Peonies. 2 to 3 ft.
 Platycodon. 1 to 3 ft.
 Pyrethrum hybridum. 1 to 2 ft.
 Thalictrum adiantifolium. 1 to 2 ft.
 Veronica. 2 ft.

Roses

Baby Ramblers (June till frost). (F. J. Grootendorst best).
 Climbing (June and July).
 Hybrid Perpetuals (June).
 Hybrid Teas (June till frost).

JULY.

Shrubs.

Cephalanthus.
 Clethra.
 Deutzia crenata rosea.
 Hydrangea arborescens sterilis.
 Hypericum (henryi).
 Koeleruteria.
 Spirea bethlehemensis.
 Spirea billiardi.
 Spirea callosa (in variety).
 Spirea douglasi.
 Spirea frobeli.
 Spirea margarita.
 Spirea sorbifolia.
 Symphoricarpos.

Vines

Clematis coerulea (July till Sept.).
 Clematis jackmani (July till Sept.).

Perennials

Achillea. 3 ft.
 Aconitum. 4 ft.
 Coreopsis. 2 ft.
 Digitalis. 4 ft.
 Gaillardia. 2 ft.

Geum. 2 ft.
 Gypsophila. 2 ft.
 Heliopsis. 2 to 3 ft.
 Hemerocallis fulva. 3 ft.
 Hollyhock. 5 to 8 ft.
 Lilium regale. 3 to 4 ft.
 Lilium pardalinum. 3 to 4 ft.
 Lilium superbum. 3 to 4 ft.
 Lupinus. 4 ft.
 Lychnis chalcidonica. 2 to 3 ft.
 Monarda. 3 ft.
 Phlox (Miss Lingard). 2 to 3 ft.
 Physalis francheti. 2 ft.
 Physostegia. 4 ft.
 Platycodon. 1 to 3 ft.
 Pyrethrum hybridum. 1 to 2 ft.
 Rudbeckia. 2 to 10 ft.
 Sedum acre. 6 ins.
 Shasta Daisy. 2 to 3 ft.
 Statice. 1½ to 2 ft.
 Tunica. 6 ins.
 Yucca. 5 ft.

AUGUST

Shrubs

Buddleia (till frost).
 Clethra.
 Desmodium (also Sept.).
 Hibiscus syriacus (also Sept.).
 Hydrangea paniculata.
 Spirea Anthony Waterer.
 Tamarix hispida (also Sept.).
 Tamarix pentandra (also Sept.).

Perennials.

Bocconia. 6 ins.
 Coreopsis. 2 ft.
 Geum. 2 ft.
 Hibiscus. 3 to 5 ft.
 Heliopsis. 2 to 3 ft.
 Hollyhock. 5 to 8 ft.
 Kniphofia. 3 to 4 ft.
 Lilium speciosum. 3 to 4 ft.
 Lobelia. 2 ft.
 Lythrum. 4 to 6 ft.
 Phlox (in variety). 3 to 4 ft.
 Physalis francheti. 2 ft.
 Rudbeckia. 2 to 10 ft.
 Salvia azurea. 3 ft.
 Statice. 1½ to 2 ft.
 Stokesia. 1 ft.
 Tritoma pfitzeri. 3 to 4 ft.

Bulbs

Dahlias.
 Gladioli.



SEPTEMBER

Shrubs

Hamamelis.
Hibiscus syriacus.

Vines

Clematis paniculata.

Perennials

Anemone. 3 ft.
Boltonia. 5 ft.
Helenium. 4 ft.
Heliopsis. 2 to 3 ft.
Hibiscus. 3 to 5 ft.
Hosta (Funkia). 18 ins.
Kniphofia (Tritoma pfitzeri). 3 to 4 ft.
Physalis francheti. 2 ft.
Salvia azurea. 3 ft.
Sedum spectabile. 2 ft.

Bulbs

Cannas.
Dahlias.
Gladioli.

Grasses

Ornamental.

OCTOBER

Perennials

Chrysanthemums (also Nov.). 2 ft.
Kniphofia (Tritoma pfitzeri). 3 to 4 ft.
Sedum spectabile. 2 ft.

Bulbs

Dahlias.

These plants bear ornamental Fruit

Trees.

Color of Bloom.

Crataegus red and scarlet.
Sorbus red

Shrubs.

Color of Bloom.

Amelanchier maroon.
Aronia arbutifolia red.
Benzoin aestivale scarlet.
Berberis red.
Colutea red seed pods.
Cydonia yellow.
Cornus alba bluish white.
Cornus amomum bluish white.
Cornus baileyi bluish white.
Cornus mascula red.
Cornus paniculata white.
Cornus sanguinea black.
Cornus stolonifera white.
Cotoneaster jet black.
Euonymus red.
Ilex scarlet.
Ligustrum jet black.
Lonicera red.
Prunus padus red.

Shrubs.

Color of Bloom.

Prunus virginiana red.
Rhodotypos jet black.
Rhamnus black.
Rosa rugosa bright red.
Sambucus black.
 Except pubens (scarlet) and racemosa (red).
Symphoricarpos occidentalis white.
Symphoricarpos racemosus white.
Symphoricarpos vulgaris coral.
Viburnum acerifolium black.
Viburnum cassinoides black.
Viburnum dentatum bluish black.
Viburnum lantana
 bright red changing to black.
Viburnum lentago bluish black.
Viburnum molle bluish black.
Viburnum opulus red.
Viburnum pubescens black.
Viburnum tomentosum
 red changing to black.

Vines.

Color of Bloom.

Celastrus brilliant red.
Lycium brilliant red.



INDEX

The index is a time-saver. Both salesmen and patrons will find it so. We have also included below a list of the Departments into which this catalog is divided. It will be helpful, too. The complete index which follows Departments includes both the botanical and common names of all the deciduous and evergreen trees and all ornamental stock that we are growing and have to offer.

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Austrian Prune Plum

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The Austrian Prune Plum for market or domestic use possesses qualities in productiveness, size, color, and hardness that are unsurpassed.

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